THE CULTIVATOR.

THIRD — To Improve the Soil and the Mind. — SERIES.

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Hoof Ail in Cattle.

MR. TUCKER—In this immediate vicinity a good many cattle are dying with what is called the Hoof Ail. They are taken lame; some will lose one hoof, some both hoofs; some will lose a foot off at the joint below the dew-claws, and some will lose both feet (hind feet.) Now if you could give your readers a remedy for the disease through your paper, you would confer a favor that would more than pay for getting up the club in this town. Some think the cause of the disease is owing to feeding them with June grass which contains a smut similar to rye smut, and which causes the stagnation of blood; while others think different. I have lost four and have three more cows affected with the disease, and if you know of a remedy I would like to have you communicate it to me immediately. F. P. BALCH. *Massena, St. Lawrence Co., N. Y., April* 9, 1855.

"Hoof-Ail," or "Foul in the Foot," is generally conceded to be the same disease, though there are some who contend that they are entirely dissimilar—the former being a disease of the upper part of the hoof extended to the dew-claw, while the latter is a disease between the claws. We shall consider them as the same disease, and will briefly give a condensed statement of the methods of treatment, which those who have had experience have found effectual.

Make an incision in the hind part of the ankle, half way between the dew-claw and the hoof, where will be found a round substance of flesh of the size of the common hazel nut. Remove it and fill the orifice with equal parts of verdigris, burnt alum and salt, and bind up the ankle with a tarred bandage.

Throw your cattle and with a sharp knife cut deep from a little below the dew-claw to the heel of the hoof from 2½ to 3 inches, and you will discover a bladder that will puff up; take a hook made of a strong wire and pull it out; then fill it up with boiling hot tar; do not be afraid of putting it in too hot.

Dissolve salt in warm water until it becomes so thick that it will no longer dissolve, and when warm apply it to the parts affected; if the disease is of long continuance, salt should be given until it operates as physic.

The following recipe is said to have effected a cure in every instance where it has been applied in the early stages of the disease.

1. Sps. terb., one pint.
2. Ol. amyg. dul., 2 ounces.
3. Nitric acid, 1 ounce.
4. Ol. succin. rub., 1 ounce.
5. Ol. oreganum, 2 ounces.

It is necessary to observe great caution in mixing the above articles or they will produce an explosion. First put the spirits of turpentine into a common porter bottle, add the other articles as numbered, and after putting in the nitric acid, the bottle should stand open until warmth or ebullition subsides, then add the succin., and let it stand in like manner; then add the oil oreganum, and let it stand open till cool, after which it may be stopped and stand with perfect safety.

A rowel of poke weed, (*Phytolacca decandra*) inserted in the breast is said to effect a speedy cure.

A farmer who had tried some of the above remedies without any benefit, thinks incisions should never be made. "The cure must be effected by cleansing the blood." This is done with saltpetre and sulphur—one portion of the former to two of the latter. They should be pulverized and made into balls with flour and molasses. Enough should be given to prove a thorough physic,—say from six to eight ounces of the saltpetre and sulphur, according to the size of the cattle. The hoofs should be bathed for half an hour each day with cold water. They must be made thoroughly dry afterwards by rubbing them with a coarse cloth or brush. If the hoofs are dry and sunken, dress them with a little neat's foot oil.

We have much confidence in the following treatment: When the disease first manifests itself, wash the foot in strong soap-suds, and then apply, twice a day, a solution of blue vitriol (*sulphate of copper.*) If the disease is of long standing, the hoof should pe pared away from the upper edge, the offensive matter taken out as thoroughly as possible, and an ointment of corrosive sublimate and lard applied. The animal should be kept from wet, and if the foot is much sore, it should be protected by a bandage of strong cloth.

Dr. DADD, in the *American Reformed Cattle Doctor*, recommends washing the feet with warm water and soap, and then the application of the following poultice:

Roots of marshmallows, bruised, half a pound—powdered charcoal, a handful—powdered lobelia, a few ounces—meal, a teacupful—boiling water sufficient to moisten the mass.

Give the animal the following at a dose:—

Flowers of sulphur, half an ounce—powdered sassafras bark, 1 ounce—burdock, (any part of the plant) 2 ounces.

The above to be steeped in one quart boiling water. When cool, strain. All that is now needed, is to keep the part cleansed, and at rest. If a fetid smell still remains, wet the cleft morning and evening with a solution of common salt—1 ounce salt to six ounces water. Whenever any fungous excrescence makes its appearance between the claws, apply powdered bloodroot or burnt alum.

The affected animals should be placed by themselves, and kept off wet lands.

Crops for Soiling Purposes.

By soiling is meant the practice of keeping cattle in the barn-yard or stable during the summer months, and feeding them on green crops. By this system, more cattle can be kept on a given quantity of land, and a large quantity of excellent manure is produced. It is claimed, too, that cattle will fat more rapidly, or give more milk, than when allowed to roam the field in search of food. In Great Britain, soiling has been pretty extensively tried, and has many advocates. There are few intelligent farmers who do not, to a greater or less extent, feed their *horses*, during the summer months, on green crops in the yard or stable. The same farmers, however, *very seldom soil their milch cows*, or other horned cattle. There are some who do,—and they earnestly recommend the extension of the practice—but there are few practical farmers who follow their example. Their chief objections are that it requires *too much labor*, and that it is difficult to get crops that are in a proper condition to cut from early spring to late in the fall.

The most extensively cultivated crop for soiling horses, is *vetches or tares;* a leguminous plant somewhat resembling the pea, though with smaller pods and darker seeds. There are two varieties; one is sown in the fall and the other in the spring. A good wheat soil suits them best, and, if properly prepared, yields immense crops *in moist seasons*. Horses thrive well on them; they impoverish the soil but little, and the land is left in fine condition for a wheat crop. The winter variety, on warm light soil, is off in good season to sow a crop of turnips after them. It will be perceived that they are a better crop for soiling horses in England, than anything which we have in this country. At the last Provincial Fair of Upper Canada at London, we saw some excellent vetches, but did not ascertain the name of the exhibitor. Will some of our Canada readers inform us whether vetches flourish in this climate. JOHN JOHNSTON, of Geneva, N. Y, informed us some years ago that he had tried them, and come to the conclusion that our summers are usually too dry for them. The advantages of growing them on a wheat farm are so great, however, that they should not be given up without thorough trial.

Red clover is another crop used extensively in England for soiling horses. For this purpose, a field is dressed in the fall, with a good coat of well rotted barn yard manure. Clover top dressed in this way, is fit for the sythe in good season. In Western New-York and Canada, we have seen heavier crops of red clover grown under ordinary cultivation, than we ever did in Great Britain under a lavish application of the most approved natural and artificial fertilizers. If red clover is sown oftener than once in eight years, and on much of the light land oftener than once in twelve years, it does not catch, or if it does, it dies out during the following winter. This is termed "clover sickness"—a disease, we believe, which is unknown in America. Could good crops of red clover be grown in England, with as little cultivation, and with such certainty as in this country, it would unquestionably be used to a greater extent than it is as a green food for horses.

We believe it would pay every farmer to take an acre or two of clover, as contiguous to the barn as possible, and manure it highly in the fall, or with Peruvian guano early in the spring. It would be found of great advantage to feed to the horses in the stable at noon, and for an hour or so before turning them into the field in the evening. Soiling, to this extent, we are confident *will pay*. A few acres so manured, and *cut early*, would afterwards yield a large crop of clover seed; or they might be mown twice as green food for the horses.

In regard to the general economy of soiling all farm stock, we are somewhat sceptical. We freely admit that more stock could be kept in this way, that more manure might be produced, and that the soil might be greatly enriched; but labor is comparatively high, and land comparatively cheap, and whether there would be *enough* gained to repay the extra expense of labor is very doubtful, *except in the neighborhood of large cities*. Nevertheless, we believe that *partial soiling* may be adopted on most farms with advantage.

Indian corn is probably, all things considered, the best green crop we can raise in this county, for milch cows and working cattle. By sowing it thick, in rows, and manuring it highly, a heavy crop of succulent stalks may be obtained, containing more nutritive matter, probably, than can be raised on an acre in any other way, except by irrigating grass land.

One of the great advantages of soiling, or in growing any food for stock, is the means it affords of providing manure for the high-priced grain crops. It is, therefore, very important that a crop, grown as food for stock, should be as slightly exhausting to the soil as possible. In other words, that when the manure made from the crop is returned to the soil, the field should be richer rather than poorer. In this view of the subject, we fear Indian corn cannot be considered so good a crop for soiling as clover, or, if they were adapted to the climate, as tares. A few such experiments as we proposed last week would decide this point.

Italian rye-grass, is a loudly lauded crop for soiling in Great Britain. There can be no doubt that it is a good food for milch cows, and that *by irrigation* immense crops of it can be grown. It is certainly worthy the attention of American agriculturists. If any of our readers have given it a trial, we should be glad to hear their experience.

Lucerne is a good crop for soiling purposes, but its cultivation is attehded with considerable labor in keeping the land free from weeds. It does not reach its full growth till the third year. It is sown early in the spring, in rows, from one to two feet apart, so as to admit of the free use of the hoe, spade, or plow. Its success depends very much on clean culture and thorough pulverization of the soil. Eight or ten pounds of seed are sown per acre. It should be cut but once the first year. After the third year, by high manuring, it may be cut three times.

Seed Time and its Labors—No. II.

Peas.—Peas and beans are termed in Great Britain "fallow crops." Peas are sown, by the best farmers, in drills about 12 inches apart, and hoed. They are thought to be one of the best of crops to precede wheat; not simply because when well hand hoed the land is left in clean condition, but principally because experience proves them to be less exhausting to the soil of those substances most required by the wheat plant. We will not say that as good wheat can be obtained after peas as after a summer fallow on the same land, but we have no hesitancy in asserting that, other things being equal, wheat will do much better after peas than after oats, barley, or Indian corn. But there is another light in which we should view the effect of the cultivation of peas. The great want of all our wheat farms is ammonia. A crop of peas of 25 bushels per acre, contains, in peas, 60 lbs. of nitrogen, and in haulm at least 40 lbs. more. Such a crop, consumed on the farm, estimating the necessary loss of nitrogen, would supply in manure 100 lbs. of ammonia, sufficient to produce at least 15 bushels of wheat, and which cannot be purchased in guano, or any other artificial fertilizer, for less than $16. The cultivation of peas, therefore, affords the wheat grower one of the best means of enriching his farm.

The great drawback to the profitable cultivation of peas, is the "pea bug." We know of no remedy that can be applied on a sufficiently large scale to be of much service to those raising peas for seed, &c. But we think that, as the bug does not materially injure the feeding properties of the peas till November or December, the crop might all be consumed by hogs previous to this. Will it not pay to grow peas for this purpose, bearing in mind the little injury they do the soil, and the great value of the manure made from them?

Peas do well on a recently inverted sod. They flourish with good cultivation on all ordinary soils, though a strong wheat soil reduced to a fine tilth suits them best. Some good farmers recommend to sow them as late as the middle of June, in order to avoid the bug. In most cases, this remedy is as bad as the disease, though we have known instances where good crops have been obtained from very late sowing. In England peas are generally sown earlier than any other spring crop. In this country, we should sow them as soon as the ground could be got into proper condition. In this way, a good smothering crop is obtained, which is harvested in season to allow ample time for preparing the land for the following wheat crop. Two bushels per acre are usually sown, broadcast. If drilled in rows about a foot apart, and hoed, they do very much better. The increase of the crop will pay for the expence of hoeing, and the land will be left as clean for wheat as though it had been summer fallowed. Generally, an application of one or two bushels of plaster per acre will be found of considerable benefit to peas.

White Beans.—Considering the comparative high price obtained for white beans, and the slight exhausting effect they have on a wheat farm, as well as the opportunity they afford for cleaning the land, we are surprised that this crop is not more generally cultivated. An old sod, turned under as soon in the spring as the ground is in good condition, and the surface afterwards well worked with a cultivator, &c., is a good preparation for beans. In this neighborhood they are usually planted about the middle of May. In Western New-York, they are often planted as late as the middle of June. Early frosts often destroy the crop if planted too early. They are planted in rows about 2½ feet apart, and two feet apart in the rows, leaving about six plants in each hill. They are sometimes drilled in rows 2½ feet apart, and only ten inches apart in the rows. The former plan requires less labor in hoeing,—and this is quite a consideration,—though it is not improbable that the thick planting in the rows may produce the largest crop. The horse cultivator should be freely used, and this, with two hand-hoeings, slightly hilling up the last time, will leave the land in clean condition for the next wheat crop. There is no crop better adapted to precede wheat than white beans when properly cultivated. They impoverish the soil but little—less than any other crop except red clover and peas—they are off in good season for wheat, and, if the cultivator has been judiciously used, the land will be so clean and mellow, that the wheat may be put in with the gang plow or cultivator. Indeed, it is said that wheat does better after beans, when put in in this manner, than when the land is plowed in the ordinary way. This is probably the case, since it is not desirable to make land too light and fine for wheat. We should expect unleached ashes to be of more benefit to beans than to any other of our commonly cultivated farm crops. We do not know whether plaster usually proves beneficial on beans.

Red Clover.—It appears to be generally admitted that clover does best sown early in the spring on the young wheat. Every farmer ought to grow his own clover seed, and sow it with an unsparing hand. At least one-fourth of the arable land on a wheat farm should be annually seeded down with clover. It does well, if the land is clean, sown with barley. We know intelligent practical farmers, in Western New-York who sow clover with barley, even when they intend to sow wheat after it the same year. The barley straw, having a little clover mixed with it, is eaten more readily by cattle; while the clover roots, and what little herbage is turned under, furnish ammonia for the wheat crop. We will not say that this course will pay in all cases, but we will say that the average yield of wheat, other things being equal, will generally be in proportion to the amount of clover grown and plowed under or consumed on the farm. Red clover is well adapted to our climate. When properly cured, it makes a valuable hay for horses; and like peas and beans though it impoverishes the soil but little, it furnishes manure rich in ammonia. We consider twelve pounds to the acre none too much seed. Be careful not to co-

ver the seed too deeply. As a general thing, we bury all small seeds too deep. The shallower the better, so that light is excluded, and sufficient moisture is obtained. One to two bushels of plaster per acre sown with the clover, will prove of much benefit to it; and the notion that it makes the straw of the wheat too rank, or delays its ripening is, we believe, without much foundation in fact. Certain it is, that some of the best wheat farmers in the country are in the habit of sowing plaster on their wheat fields for the benefit of the clover. It has no effect on the wheat, but proves of great value to the young clover. There are two kinds of red clover, the small and large, or, more properly, the early and late kinds. The late kind grows large and coarse, and is well adapted for manuring purposes, and, as it ripens at the same time as timothy, it is considered preferable to the small kind for mixed hay. The small or early kind, however, is doubtless the most nutritious, and is the most popular.

Culture of Teasels.

The best soil for teasels, is a gravelly loam approaching to clay. Sandy or muck soil is not good. The best course is, to turn over in April, green-sward, with a good coating of manure, harrow very fine, and when the weather is dry and soil mellow, sow, with a drill or by hand, in rows 3½ feet apart, and so thick as to ensure one or more plants to each foot in the row. Soon as they are up, so that the rows can be seen, run a cultivator or small harrow two or three times between the rows, and thin them with the hoe to six to twelve inches apart. Keep the cultivator and hoes at work through the summer, or go over them three or four times, and suffer no weeds to grow with them. This ends the first year. The second year, run the cultivator through them as soon as the ground is dry in spring, and mellow it well. If the weeding was thoroughly done the previous year, the hoe will not be needed now.

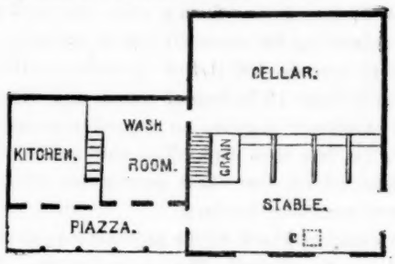
Now for the cutting and curing. Build sheds, open at the sides like corn cribs, with loose cross timbers, inside, about one foot above each other. Then begin a floor on the bottom tier, of narrow boards, laid 1½ or 2 inches apart. We are now ready to cut them. Baskets holding about 2½ or 3 bushels each, are best for cutting into. Shears of common size, ground to a thin sharp edge like a knife, are best to cut with.

About August 1st, they will be fit to cut. This is known when the blows, or petals, have fallen. This does not occur on all at the same time, or all at once on the same teasel, but gradually for a period of several days, depending on the weather. No teasel is really fit to cut until all the blows have fallen from it. Hence it is necessary to go over them about three times. As fast as cut, they should be spread on the open floors described above, so thin that they will not mould, which they are very apt to do in warm or wet weather. About 3 or 4 inches in depth is enough for each floor. The more carefully they are handled in cutting and curing, the better the article. Each cutting should be kept separate. Four to six weeks will dry them, when they are ready for market.

Mr. ROCKWELL can readily see that the crop must sell pretty well, to leave a profit to the grower. Two years use of the land, and constant attention, is necessary to secure a crop. None but a thorough man, can try it with any hope of success. At present, prices are very low, and but comparatively few are used. Frequently the crop is on hand from 3 to 5 years before it is all sold. Present prices, from 70 cents to one dollar per thousand of 10 lbs. Average crop, about one hundred thousand per acre. L. J. H. *Auburn, N. Y., March 12th*, 1855.

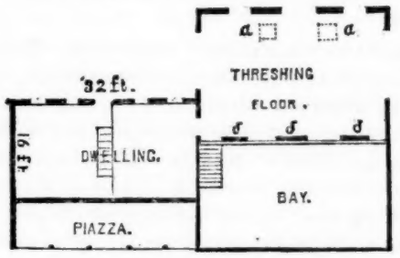
Hill-Side Barn.

I noticed in a late number of your much valued paper, that a subscriber wishes a plan for a "side-hill barn," and I would simply state that I built one last summer, that is "worth coming to see."



BASEMENT.

First—I can drive on the threshing floor, which is on a level with the top of the hill, as also, on the stable floor, and in the manure cellar below it, which is a very great convenience. It is only 30 by 40, and yet it is a large, or a big-little barn, for it is, improperly, four stories high, and the amount of room, and the convenience for doing work is great.



FIRST FLOOR.

Second—I have a brick cistern at the upper side of the barn, containing forty hogsheads of filtered water, which is conducted into the stable by a lead pipe, as also into the "wash room" adjoining, where vegetables are cooked for swine, and conveyed to them, (in the manure cellar) by a sewer which also carries off all slops, &c.

The third and greatest convenience connected with my barn is, *having my farm house joined to it;* and with regard to this I can say, as of my poultry house, it is *highly approved by the tenant.* My man can pass from one to the other without going in snow or water, for when he comes home in a snow storm, he drives di

rectly into the barn-yard; and in the morning, he steps in and feeds at 4 o'clock; then takes a nap, and is ready for work betimes.

There are but two objections made to this close proximity of house and barn—first the "smell," and second, the greater loss by fire, if it should take in either part. As to the first, I would say the manure being kept in a cool damp place, and separated by a brick wall, does not *prove to be* as offensive as common barn-yards, though they are many rods from the house. As to the second, if it is a good reason, it is good against large barns, or any barn at all. I keep it well insured, and if it burns, why let it burn.* J. H. D. *Troy, N. Y.*

* Our correspondent may easily satisfy himself and others, as to the *economy* of this connection, by making a careful annual estimate of the saving by such contiguity, and then see what would be the *additional* insurance charged when the two are together, above the cost of insuring the barn and farm-house separately. If this additional insurance is less than the saving effected by the arrangement, there is, of course, a decided saving all round. Eds.

The Grass Crop.

Messrs. Editors—We have taken and read your able paper for ten years, and have seized upon every new number to find something touching our particular hobby, viz., the cultivation of the grasses. We have kept every number, and had them bound in skiver in imitation of the law of the land. We have seen it frequently and broadly hinted that we have no excuse for raising a mean and meager crop of hay, and stated that "no farmer has any business to cut less than two tons per acre." This we do not fully comprehend, as we are ignorant of the cheap mode of doing it. We have in some cases turned over our mowing land in the month of August, to the depth of 7 or 8 inches; manured with twenty-five loads of compost, reseeded to grass without taking any crop, and the prospect is rather flattering for hay. How long land treated in this manner will continue to yield bountifully remains to be proved; but one thing is certain, in most of our lands, when we have taken a crop of corn, potatoes and wheat or oats, there is but little virtue left of the compost applied to produce this much desired and valuable crop.

This skinning is working towards the "little end of the horn," and to depend upon a "good season for hay," by waiting for the rains and snows to do the job, or the three per cent. superphosphate of lime, or giving fifty dollars a ton for guano, and depending upon the phases of "Sol" and "Cynthia," leaves the stock-raiser with but partially filled barns, to carry his flocks and herds through twenty weeks of cold inclement winter, and makes farming as unprofitable, as in some sections, it is mean and unpleasant.

The soil of New Hampshire is as good as any in the country—(we think so,) taking all things into the account. We live in the region of the grasses; the right latitude, and the right altitude, and we intend to take the advantage of it sooner or later. New Hampshire has raised 140 bushels of corn on an acre, and 60 bushels of winter wheat—has raised hogs that weighed 800 lbs. and Morgan horses that sell for thousands. Mr. Wood of Lebanon, N. H., living in a section called Poverty-lane, has raised a pair of steers measuring nine feet in girth, and are just sold for $225.00; you will yet hear from them at the mart. Yet the mowing lands of the state, do not produce one ton of hay per acre.

We are making one hundred loads of compost this winter in our sheds, composed of two loads of muck, and one of sheep manure; this we wish to apply in the spring, either as a top-dressing, to dry upland mow-fields for hay; or to an oat crop for oat hay, or for corn fodder, or in some other manner, to obtain the greatest amount of winter forage for sheep. We ask how to do it?

An article on the best method of raising a great hay crop, would be read by some of your subscribers with great gusto. Charles Colby. *Meriden, N. H.*

The above communication, received some time since, was mislaid, or it would have had an earlier insertion. The hay-crop is one of vast importance, and we shall be glad to receive from our readers any suggestions for its increase, which their experience may have taught them.

Flag Stone for Stables.

Messrs. Editors—As some inquiries of my own have been answered through your paper, I am bound to reciprocate the favor. *A Subscriber* inquires "how flag stone would answer for stable floor for cattle in a bank barn." I have tried it, and am well pleased with the result. The stone should be at least 1¼ inches thick, and if iron shod oxen or horses are to be placed in it, 2 inches thick. They should be neatly jointed so as not to permit the liquid manure to escape into the ground beneath. The floor should descend from the head of the stall to about 2 or 3 feet beyond the heels of the animal, and then rise in 2 or 3 feet to the same level, forming as it were a broad shallow gutter, about 6 inches deep. This gutter, running lengthwise with the stables, and also descending, will carry off to the manure heap the liquid manure, and facilitate the operation of cleansing the stable.

The expense of flagging was with me about the same as a 2 inch plank floor of the same extent. The flags, if well laid, maintain their place very well, and are preferable to wood, provided your cattle are littered. But if it is not intended to litter them with straw or corn stalks, or some other suitable material, I would recommend plank as preferable on account of the cold and slippery surface of the flag stones in winter. J. L. Shields. *Sewickly, Pa.*

Agriculture ought to borrow from every science the principles which she employs as the foundation of her own; and although the sciences do not form an indispensable part of the farmer's education, he ought, nevertheless, to have a general knowledge of them.

Grafting the Sugar Maple.

H. STEARNS, of Felchville, Vt., in a communication which we have not space to publish entire, calls the attention of cultivators to the importance of the cultivation of the sugar maple, not only on account of its cool refreshing shade, but more especially for the purpose of manufacturing sugar.

After alluding to the varieties into which the sugar maple runs, some rare specimens of which far exceed others in beauty and denseness of growth, which desirable characteristics may be perpetuated by budding or grafting, he examines more minutely the difference in the saccharine productiveness of certain specimens. He assures us that the best trees produce fifteen pounds of sugar per annum, or more than three times that afforded by inferior specimens. He proposes to line the public road with trees propagated from the most productive the country affords, or that a single acre of ground be planted on each farm with one hundred trees. Cultivating them with crops for ten years, and allowing five additional years for growth, they are estimated as large enough for tapping. Fifteen pounds from each will afford fifteen hundred pounds yearly, worth at twelve and a half cents per pound, the sum of $187.50, as the product of a single acre.

We believe the estimated product of each tree is a very high one, and we give this estimate merely as a suggestion to further inquiry. When the cost of labor and fuel is taken into the account, we question whether a higher profit would not be realized by setting out an orchard of the *most productive sweet apples*, or with an acre of the best winter apples. We invite the attention of landowners to the importance of raising maple groves, which must increase in value as timber becomes scarcer; and we hope the subject of the manufacture of maple sugar will receive a careful examination.

The Currant and Currant-Borer.

MESSRS. EDITORS—Early in the spring of 1853, I procured over a hundred fine cuttings from the best varieties of currants, from one foot to 18 inches long, of the previous summer's growth; and wishing to train them like a miniature tree, with a single stem a foot from the ground, as directed by Mr. Downing, and some other writers, I took off all the eyes from two thirds of the lower part of the cutting, and planted them in nursery rows. In the spring of 1854, I set them out, 4 feet apart. Last summer and fall they seemed to be doing remarkably well, many making shoots two feet long; consequently great was my surprise in looking over them a few days ago, to find nearly half of them dead—the tops of many were green and fresh, while the main stem and roots were black and dead. Will you please to give me your opinion in regard to my losing so many in that way? I noticed that some appeared to have been killed by a worm entering them in the branches and descending the main stem, and leaving it black and hollow in the center; but the greater part of them bore no mark of worms or insects.

I should like to know what insects attack the currant and what diseases they are subject to, and the best preventive against them, and remedy for them. J. W.

We have found in this land of hot sunshine, that a single stem for the currant a foot high is not so well as a very short one, or with the branches spreading nearly down to the surface of the earth. The growth of the currant is still more certain, where several proceed from beneath the earth, as the new shoots are a spontaneous renewal of the plants, care being taken to cut out all old wood that has remained longer than three or four years.

The currant-borer is not a very uncommon insect in some parts of the country, often destroying young plants of two or three years of age raised from cuttings. The larvæ are produced from eggs laid singly, near the buds, and when hatched they pass to the pith and devour it. Small-sized fruit is usually the first indication of their presence. The stems break off, or become sickly and die. The remedy is cutting and burning. The perfect insect is a blue-black moth.

The cause of the death of those plants named by our correspondent not effected by the borer, we cannot determine.

Renovating Orchards.

MESSRS. EDITORS—Can you or any of your contributors, give me any information as to the best method of renovating an old orchard? I have not found any directions in any book to which I have access? H. *Lee, Mass.*

If in sod, plow, harrow, and tear the plowed turf to fragments by re-harrowing—plowing shallow near the trees, and deeper more remotely. Apply a good coating of stable manure, with a hundred or two bushels per acre of leached ashes, or fifty bushels of unleached ashes or lime per acre—harrow these all into the soil, and plow under as deeply as the roots will allow. Thin out the heads, by removing all dead, decaying, or badly stunted and crooked branches, avoiding if possible the lopping of very large limbs; and if re-topping is necessary, follow the directions in the 10th number, current volume, of the Country Gentleman. This treatment will impart new vigor to old trees, the crops will be increased, and the fruit rendered much larger and greatly superior in quality. Where the soil is naturally rich, the application of ashes and lime without manure will be sufficient, provided the thorough mode of pulverizing the soil is adopted as above described. It will not *pay* to plant any crop, if the trees shade most of the ground. In old orchards, the roots extend over the whole surface, and therefore the manuring and cultivation should be *broadcast*.

Ornamental Hedges.

Will you oblige a subscriber to your valuable paper, by giving in your next Country Gentleman, your opinion as to the best ornamental hedge for a lawn and around a garden, as I am about to set out this spring, one for each. A SUBSCRIBER. *New-York.*

For an *evergreen* hedge (which we should prefer, for its appearance in winter, and the shelter it affords,) the American arbor vitæ will answer best, as it is comparatively easily transplanted, and bears shearing into any form. The hemlock, however, makes a handsomer screen from its lively green; but the plants are harder

to procure, and more difficult to transplant. Both may be obtained of Dell & Collins, of Waterloo, N. Y, and of other nurserymen.

The Buckthorn and privet both form handsome deciduous hedges, hardly stiff enough however, for a barrier against cattle. The privet forms a more dense wall of verdure, and will grow best under the shade of trees, --which very sensibly affects the buckthorn. The Osage Orange forms the best hedge for the exclusion of *boys*, and all other lawless animals.

Regrafting Old Trees.

EDITORS OF THE COUNTRY GENTLEMAN—About a year ago, I purchased a farm having upon it an orchard of about one hundred thrifty, good, bearing trees. planted some fifteen years ago. But the fruit is of inferior quality: and wishing to obtain good fruit, last spring I had them grafted in the limbs so as to form new tops, and notwithstanding the drouth of last summer they grew well,—many of them are two and a half feet in length. I wish to know at what season of the year, and what proportion of the remaining branches, or if all should be removed at the first pruning, and if it is necessary to apply any mixture or preparation to the wounds, and of what it should consist.

Orchardists and horticulturists are not favorable to this method of propagating fruit, and have not given any directions in relation to it that I have observed. Please state the best wash to apply to trees to remove the rough bark. An early answer to this will oblige, yours, A. S. HAWTHORN. *Harlinsburgh, Lawrence Co., Pa., Feb.* 21, 1855.

Our correspondent will find this subject treated of fully, in the late editions of the American Fruit Culturist—and also in an excellent article recently furnished by a correspondent to this paper, which we published last week. *Properly managed*, a bearing orchard of the best grafted varieties may be obtained sooner than in any other way, by regrafting large trees, provided they are not so old as to be diseased, decayed, or stunted. Our correspondent will perceive, from the directions we have referred to, that the process of renewal and removal of old tops, should not be completed in less than about three years. If too many are lopped in a single year, and especially if the trees are quite large, a great and injurious check will be given to the growth of the tree. Autumn or winter is the best season for the removal of unnecessary branches; any time but spring may be chosen. A varnish, made of shellac in alcohol, about as thick as paint, is the best application to the wounds—but a mixture of tar and brick-dust, applied warm, does well, and even common oil-paint will answer. Weak lye or soap suds, is the best application to the bark, after it has been scraped, if rough.

Culture of Asparagus.

The Co. Gent. p. 123, current vol, contains some good practical directions. We may add briefly, that it is a plant that will bear an exceedingly rich soil, provided the manure is finely and thoroughly incorporated with the soil, and that *plenty of room is needed for each individual plant*, its large growth depending on this as an indispensable requisite. From our own observations, we are inclined to think that for its market production, it should be in drills sufficiently remote to admit a narrow horse cultivator. A very common cause of *small shoots*, even in beds which have been dug and enriched two feet deep, is planting too thick or near together, and afterwards allowing the evil to become increased by the self-sowing process, numerous young plants springing up all over the bed. We would give three leading requisites of success, namely—1, *good soil*--2, *good cultivation*—and 3, *plenty of room*

Spring Pruning of Hardy Grapes.

MESSRS. EDITORS—I wish to learn the best time for pruning grape vines. I have been accustomed to do it late in autumn, when I take down and cover them for the winter. In an article on "Pruning the Grape," on page 74 of the current volume of the Country Gentleman, are directions, in which you say, that "when a vine is first procured from the nursery in the spring, it is usually furnished with several irregular shoots of the previous summer's growth;" and that "these should be all closely pruned to the older wood." Now, I wish to inquire, whether this pruning may be done safely in the spring. I have been taught to do all my pruning in autumn, even to the young vines intended to be taken from the nursery and transplanted the following spring. The reason given is, that all cuttings and wounds made in the spring, cause the vines to *bleed*, and consequently injure their growth.

Will the Catawba grape mature in the open air, north of the 44th degree of N. Latitude? D. V. C. *Chimney Point, Vt.*

It has been an almost universal opinion, that the *bleeding* of grape vines from spring pruning, greatly injures them, and the assertion has not unfrequently been made, "they will bleed to death." We have never discovered the least injury from it so far as *hardy* grapes are concerned; we prune in spring freely, and our experience corresponds with that of several others; some large raisers of grapes, even think the vines are actually benefitted by it.

There is no probability that the Catawba grape will ever fully mature at our correspondent's residence in open air, even if trained on a south wall. He must look to the Diana, Clinton, Concord, and when in a warm place and well summer pruned, to the Isabella.

Horticultural Inquiries and Answers.

1. Should apples be kept out of the cellar after being gathered, till cold weather, in order to keep well, as some say?

2. When planting potatoes with mulch, leaves, &c., should there be earth put on before dropping the seed? I observe they are a long time coming up when mulched.

3. I have heard of the peach being grafted on willow, I think, and other woods—does it make them more hardy, and bear any better? They do nothing here.

4. What kind of grape will endure this northern climate without shelter in winter?

5. Where you wish to water any thing with nitrate of soda how much to a pailful of water?

6. Is there a remedy for the black bunches on plum and cherry trees? I have cut them off and see little benefit.

7. Is there a way to make old strawberry beds bear, without renewal? *Westernville, Feb.* 1855.

ANSWERS.—1. They should be kept *cool*—if the cellar is cold and not damp, it is a good place; if warm and wet, it will prove unfavorable. The sweating pro-

cess deprives them of a small portion of their water, shrivels them slightly, and lessens their tendency to decay.

2. Cover first with earth, and let the sun act upon it till dry weather approaches, and then apply the mulching. In this way they are benefitted by early warmth, and protected from parching drouth.

3. The peach will never grow on the willow—they are totally dissimilar in nature; we should as soon expect to raise grade calves by turning a short-horn cow to a polar bear. Working the peach on the wild plum tends to render the trees so worked rather hardier.

4. The Clinton, Diana, Concord, and Isabella.

5. Nitrate of soda is very soluble, dissolving in three times its weight of water at 60°, and less than its own weight of boiling water. It should be much more largely diluted, for watering plants; say half a pound or less to a pailful of water. It is usually applied dry, in compost, to ordinary crops, at the rate of one or two hundred pounds per acre, being about one pound to a square rod.

6. The remedy is cutting, and *keep cutting*, washing the wounds where large with chloride of lime. The disease will not be kept under unless this treatment is unremittingly applied—if done only occasionally, or after the tree has become much affected, and the wood filled with the disease, little benefit can be expected. "Eternal vigilance" is the price of good fruit, as well as of other productions of the soil.

7. Old plants have their day—a spontaneous renewal may be affected, by allowing the runners to fill up the spaces between the rows, and then drawing lines at the proper places, to spade in all the old plants—leaving only a narrow strip of the rooted runners.

Pears on Apple-Stocks.

Can you tell me whether pears would do well grafted or budded on apple stocks? W. H. W. *Dubuque, Io.*

It is very rare that pears succeed well on apple stocks. Sometimes they will give much promise for a year or two, and then fail. The Winkfield and Summer Bonchretien, will often grow freely for a few years. We have raised about one peck of fine Seckel pears on a small tree on apple root, five years old, but the union being imperfect, it broke off at the surface of the ground. We cannot recommend the practice, except to those who are fond of unsuccessful experiments, often not one in a hundred succeeding after the first year or two.

Peach Blossom Destroyed.

To all appearance a large portion of the Peach blossom is destroyed in this garden. In view of this, the trees will not receive their regular pruning, until the season is sufficiently advanced to determine to what extent they are damaged; which will give an opportunity of pruning them so as to leave those unhurt (if any) on the tree as much as possible. The lowest point observed by the thermometer in this garden (a very sheltered one,) was *eighteen degrees below* zero. E. S. *Albany, March* 15, 1855.

Guano on Grass Lands.

Wishing last spring to improve my grass ground at once, without breaking up the sod and reseeding, I sowed some Peruvian Guano with a very beneficial result. One piece of grass was in my house lot,—an open space of several acres surrounding my dwelling, and too much broken and covered with scattered trees and shrubbery to be ploughed with advantage. The soil here is dry and gravelly, yet with sufficient loam, and naturally fertile. The piece had been in grass for twelve or thirteen or more years, without of late receiving any top dressing but plaster. On this plot of about 6 acres, I sowed in the neighborhood of 175 lbs Guano per acre. Fearing that I might injure the grass, if this were put on in its whole strength, I used a compost of 2 parts of earth loam to 1 of Guano. I am now convinced that this was unnecessary, as far as injury to the grass was concerned, though it was of advantage in more uniformly distributing the Guano over the ground. When this manure is brought directly in contact with the delicate germ of a plant as it issues from the seed, it is too stimulating undoubtedly. Such appears to be the general experience of Cultivators of the more tender products of the garden, but the ordinary herbage of the field is not injured by contact with Guano.

The Guano was sowed in the middle of March; two spaces, one on the north and the other on the south side of my house, were left without sowing. By the middle of April, the effect was very perceptibie, and the sowed and unsowed portions were easily to be distinguished even at a distance. The superior growth and thickness of the manured crop, was maintained up to the time of haying. I had no means of comparing the quantity of grass cut at the time with what had been obtained in former years, as this was my first summer on the place, but the men who mowed for me and who had worked a number of years for the former proprietor, said that it was the best crop that they had ever seen on the ground. Nor was I able to discover whether the guano was efficacious in promoting the growth of the aftermath, inasmuch as the severe drouth set in just after haying, and entirely prevented the growth of any grass until fall. At that time the growth, as far as it went, was thick and luxuriant, but I should judge not to any unusual degree.

I sowed in a similar manner, about 2 acres of pasture land, putting on however in the neighborhood of 230 lbs per acre. The vegetation here was of the richest green, and was undoubtedly improved by the application. It held out uncommonly well during the dry weather. This ground was rather of a low, wet nature, subsoil clay. When Guano can be obtained at about $50 or $55 per ton, and the price of hay is from $15 to $20, it may, in default of other manure, answer a good purpose. It is a convenient and useful manure for improving lawns and grass on grounds, where, for various reasons, it is not desirable to introduce the plough. It answered my wishes in this respect, last season.

I used Guano last summer, on corn, oats and potatoes, but there was no extraordinary result visible, principally I suspect from the unwonted dryness of the season, which hardly allowed crops to grow at all. I must say that the crops did promise to excel during the first part of the summer, and no doubt they would have fulfilled expectations had they been permitted to do so. I was myself sufficiently satisfied with the application as regards grass, to determine to try it again on two other fields this coming season. H L. YOUNG, *Poughkeepsie.*

Seed Time and its Labors—No. III.

CARROTS.—We do not know of any other root crop that appears to be so well adapted to our climate and circumstances as carrots. Doubtless, the common turnip, so extensively grown in Great Britain, draws less on the soil than carrots; and, where climate is suitable, affords a better means of enriching a farm. For this reason, we would do all in our power to extend the cultivation of turnips, ruta bagas, &c., but, at the same time, we must admit that they do not appear to be so well adapted to this climate as the carrot; and they certainly are far inferior in nutritive quality. Carrots require much more labor in weeding, and must be sown earlier and at a busier season than the turnips and ruta bagas. Nevertheless, carrots are an exceedingly valuable root crop, and no farmer should be without a considerable plot of them. As a condiment for horses, there is nothing equal to them, and while we cannot agree with those who consider a bushel of carrots equal in nutritive value to a bushel of oats, or with the learned Professor who asserts that, because carrots contain pectic acid, they gelatinize the food in the stomach of a horse, and make it more easily assimilable, yet, as an auxiliary food for horses and milch cows, carrots, and indeed most other roots, are of much more value than the simple amount of nutritive matter they contain would indicate.

A deep, rich, mellow, loamy soil,—not too heavy, and yet containing sufficient clay to enable it, when well tilled, to resist an ordinary drouth,—is admirably adapted for carrots. From 20 to 40 loads of well rotted manure per acre should be spread upon the land in the spring, and incorporated with the soil as much as possible, *before plowing*, with the cultivator or harrow. Then plow it under as deep as the nature of the soil will warrant. Let four hands follow the team, and rake in to the furrow any manure that may be left uncovered, leaving the surface clean and mooth.

The ground should be sown soon after it is plowed, while moist, in rows 12 to 14 inches apart, and about half an inch deep. The soil should be pressed on the seed by treading or rolling. If this is done, and the seed is soaked 48 hours in tepid water, and then dried with plaster, till it will separate readily, before sowing, the difficulty of deficient germination, which many complain of, will be avoided. If sown by hand, 4 lbs. of seed per acre is the usual quantity; if with a drill, 2 lbs. will be sufficient. In the former case, the land should be marked out with a marker made for the purpose, and the seed be covered with a rake.

In this vicinity, carrots should be sown as early in May as the season will allow. If the weather is favorable, they will be up and ready for the first hoeing in about three weeks. The hoe should then be passed lightly through between the rows to kill the weeds. This is very important. Much labor of weeding afterwards will be saved by thus destroying the weeds before they have full possession of the gronnd. The stirring of the soil also helps the growth of the carrots. In ten days hoe again, weed the rows, and thin out the carrots if too thick. After two weeks, hoe deep, weed, and thin out the carrots to four or five inches apart in the rows, and the work is complete for the season. E. S. HAYWARD of Brighton, Monroe Co., N. Y., a very successful carrot grower, adopts this system of management. We were over his farm during the severe drouth of last season, and his carrot crop was growing in fine luxuriousness, apparently suffering no injury from the drouth. The land was entirely free from weeds, the hoe was passed through the rows frequently, and doubtless this constant stirring of the soil had much to do in mitigating the effects of dry weather. Mr. H. averages about 1000 bushels of carrots per acre. He says "there is no crop the farmer can raise that pays so well, or yields so much good feed for stock."

Experiments were made with artificial manures on carrots on the State Farm of Massachusetts last year. The manure was apportioned according to its cost, each acre being dressed with twelve dollars worth. The result was as follows:

Barn yard manure,	753 bu. per acre.
Guano,	660
Potash	628
DeBurg's superphosphate of lime,	586
Mapes' "improved," do	572
Reservoir manure,	510

The report does not inform us what kind of guano was used, but we suppose it to be Peruvian. Good Peruvian guano sown broadcast on the land after it is plowed, and cultivated in, thoroughly incorporating it with the soil, is unquestionably an excellent manure for carrots. A good superphosphate, *in addition to* rich, well rotted barn-yard manure, is recommended. One great advantage of artificial fertilizers for such crops as carrots, onions, &c., is that they are free from weeds and act quick.

POTATOES.—As our correspondents have favored us with several excellont articles on the culture of this important esculent, we will only briefly allude to the fertilizers best adapted for the growth of potatoes.

Repeated experiments have confirmed the correctness of the common opinion that nothing equals hog manure for potatoes. The cold nature of this manure has perhaps something to do with this, but we apprehend that it is due principally to the fact that, hogs eating much grain, the manure is especially rich in ammonia. At all events it is pretty well ascertained that ammonia is largely required by the potatoe crop. Hence for *the production of a large crop*, rich nitrogenous manures, and Peruvian guano are the best.

Potatoes generally command a higher relative price than most other crops. Peruvian guano is an admirable manure for wheat, but at ordinary prices, say $1.00 per bushel, it is questionable whether its application *pays*. On potatoes, at average prices, Peruvian guano is a highly profitable fertilizer. In 1853, H. C. IVES, Esq., of Rochester, planted four acres of potatoes, two without manure and two dressed broadcast with 600 lbs. of Peruvian Guano. The former produced 238 bushels, the latter 410 bushels. That is to say, for 300 lbs. of guano, an increase of 86 bushels per acre was obtained. Last year Mr. C. W. Seelye of Rochester, obtained an

increase of 24 bushels per acre from 150 lbs. of Peruvian guano. The less increase in his case, is probably due to the drouth.

The experiments on potatoes on the State Farm of Massachusetts, last year, resulted as follows:

Barn-yard manure,	86½	bu. per acre.
Mapes' superphosphate,	84½	"
De Burg's do	77½	"
Guano,	92½	"

Twelve dollars' worth of manure was used in each case. It is to be regretted that the yield of the land without manure was not ascertained. The crop, owing to the drouth, was small. The guanoed acre yields the best, though it is well known that dry weather is more hurtful to the action of guano than to that of superphosphate. In another case on this farm, on land that had not been manured for four years, having been mown three years, and the last year cultivated with corn cut for fodder, "400 lbs. of guano gave 189⅞ bushels of superior potatoes per acre."

From what we have seen of the effects of good Peruvian guano on potatoes, we feel great confidence in recommending it as a profitable fertilizer for this crop. We would sow from 300 to 400 lbs. per acre broadcast, and thoroughly incorporate it with the soil before planting the potatoes. A somewhat better effect would be obtained by applying the guano in the hill, covering it with two inches or so of soil, and planting the potato on the top of it. Unless great care is used, however, there is danger of the plant being injured by coming in contact with the guano. It should be scattered over at least a square foot.

Culture of the Potato.

We have been furnished by Mr. JOHN R. CHAPMAN of Madison county, with an article which he wrote two or three years since, on "the planting, cultivating, digging and cellaring of potatoes." It is all good, and we should be glad to give it at length did our limits permit. We give below what he says upon the soil, the seed, and planting, and shall hereafter copy what he says upon cultivation, harvesting, &c.

For the benefit of those who are anxious to live and learn, I will now detail my system of planting, cultivating, and preserving the potato. They can adopt my ideas and method, or not, as seems to them best, but one fact is certain, that if the seasons turn out ordinarily wet, it will be useless to plant potatoes in the expectancy of a sound crop, unless strict attention be paid to the preparation of the soil and time of planting, quality of seed and mode of cultivation, time of digging, and method of preserving during winter.

1. PREPARATION OF SOIL.—The best soil, in my opinion, for the growth of sound potatoes, under all seasons, is a sandy loam, resting upon a porous subsoil, with the surface flat and sloping just enough to carry away the water proceeding from a heavy fall of rain. But as every farm will not give us this peculiar soil and situation, we must make the best use of what we have, keeping in view one fact, however, that it is useless to plant potatoes in low wet ground, for they will surely rot. The best plan is for a farmer to set apart four acres of his highest, dryest, and strongest land, and plant one half of it the first year with corn, taking care to plow under a heavy coat of cow dung; the remaining half he can sow with any grain that will give a fair crop. If the soil have been run hard previously, let a top-dressing of twenty bushels of lime to the acre be applied. The year after let him plant with potatoes the half that was corn, and let the half that was grass be planted with corn, and manured if necessary. When plowed for potatoes, the lands ought not to be more than seven paces wide, and plowed eight inches deep, and after planting, the dead furrows ought to be plowed out beam deep. By thus taking an alternate crop of corn, potatoes, and grain, and manuring for the corn, only, he will keep one half this patch of land in most suitable condition for raising sound potatoes. This system will require the land to be manured every five years, enough if a good heavy coat be plowed under.

2. TIME OF PLANTING.—The best time for planting, in my opinion, is the fall of the year—say the last week of September in Central New-York,—but as fall planting, in this country is impracticable, on a general scale, unless other crops be neglected, the best time for planting is as soon as the land can be fitted in the spring. Late planting is a serious error, for it is much more natural for seed potatoes to be in the ground than sprouting in the cellar, or wilting on a barn floor. And it is a fact, that the potato tops, whether planted in April or June, generally show symptons of disease in the last week of August, after which event the young tubers discontinue growing. Therefore those potatoes which are planted the earliest will have the longest time to grow, and consequently produce the largest tubers, and the heaviest crop. In times, before the appearance of the rot, the potatoes were generally planted in June, and the tops continued green and growing till nipped by the October frosts, thus allowing full four months for the growth of the plant; but, as things now stand, if we wish the same time of growth, we must plant as early as possible. The soundest and highest colored potatoes I have ever grown, were self-planted in the fall, or what we term "volunteers," and this is a great fact in favor of fall planting.

3. QUALITY OF SEED—Some of the choicest kinds of potatoes at the present time are more inclined to rot than some of the meanest and coarsest. Unless much attention be paid to cultivation, these choice kinds will soon become extinct, for a farmer who plants for a crop will soon only plant those kinds which will produce sound. I would advise the farmer to plant from those kinds which appear to stand the rot the best in his own immediate neighborhood, and not be captivated with the ideal reports of qualities of potatoes grown some 100 miles away. After determining to plant the soundest kinds of potatoes, let him select whole sets of a medium size,—a common hen's egg being a proper gauge. The smallest and the largest, although capable of producing well, are not, in my opinion, as desirable as even moderate sized seed. But under all and every circumstance, avoid planting cut sets, eyes and peelings. The fact that sound crops have been and are now produced from cut sets, is no more an argument in their favor, than a previous sound constitution, or a week's hopeful recovery, is any sign of a permanent cure of a consumptive patient. In Central New-York the "pale reds" and early "pink eye," are considered the least liable to rot, and the common "pink eye," "Philadelphias," and "Carter's" the most liable. For a general crop I would recommend the "pale reds," for early use the "early pink eye."

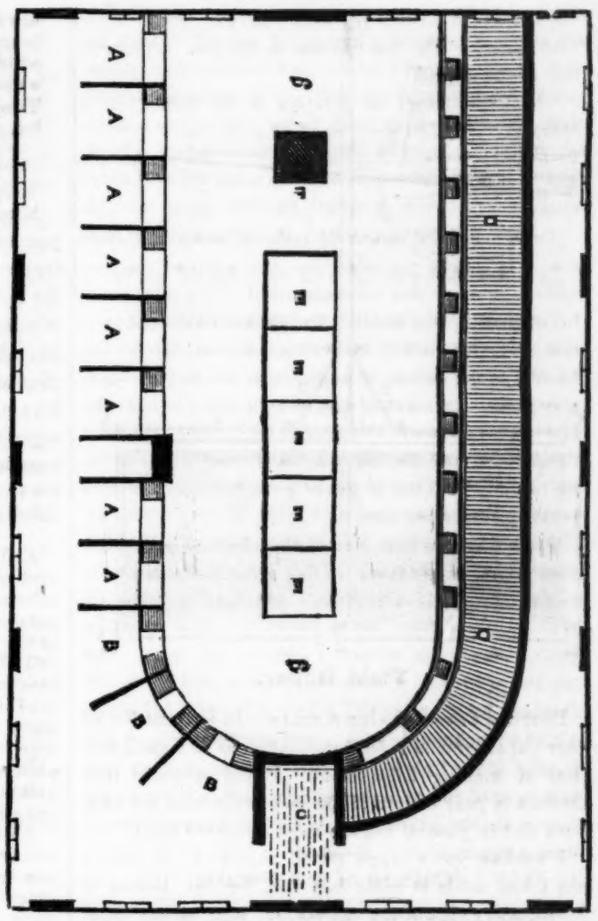
SWEET POTATOES.—A subscriber at Columbia, Arkansas, writes us as follows—"The best and most productive variety to cultivate here in this region (33° 20') we find to be the *Large Red Spanish*."

PROFITS OF ORCHARDS.—A distinguished agriculturist, who has 1000 apple trees, and intends to set out as many more, says that if apples will sell at 25 cents per bushel, they are his most profitable crop—and if they will not sell, they are the cheapest food he can raise for all kinds of animals.

Plan of a Barn.

From inquiries in your paper, as well as from personal observation, I am satisfied that the farmers generally suffer much inconvenience from the want of properly planned barns and stables The accompanying plan I take the liberty to submit to you, as economical and convenient The plan is not artistically drawn, but I guess can be understood. B. B. *Pittsburgh Pa.*

Basement Plan of a Bank Barn.



Whole size, 40 ft. by 65 ft.

A. and B. Horse stalls, 5 by 6 ft. with troughs and open box mangers—floor slightly inclined and paved.

B. Open stalls for transient horses.

C. Large entrance to feeding floor.

D. Cow stalls, 4 by 4, with floor inclining to the trench—which catches all dropings and the liquid manure.

E. Grain boxes, 5 by 5, to which grain is conducted by cloth spout from the threshing floor above.

F. Steam tank—wooden, with a tight lid, fed with steam through a pipe from a boiler without, and with cut feed through a cloth or wooden conductor from the floor above.

G. The feeding floor—elevated about 14 inches above the stable floor, tightly planked, and supplied with hay, &c. from the mows above.

The doors and windows are numerous, for abundant light and ventilation; and the windows should be closed with glazed sash in the winter season. The horse stalls should be boarded only a part of the way up, and each upright supplied with stout pins for harness, &c. The cattle fastenings should be the upright stakes and clasps.

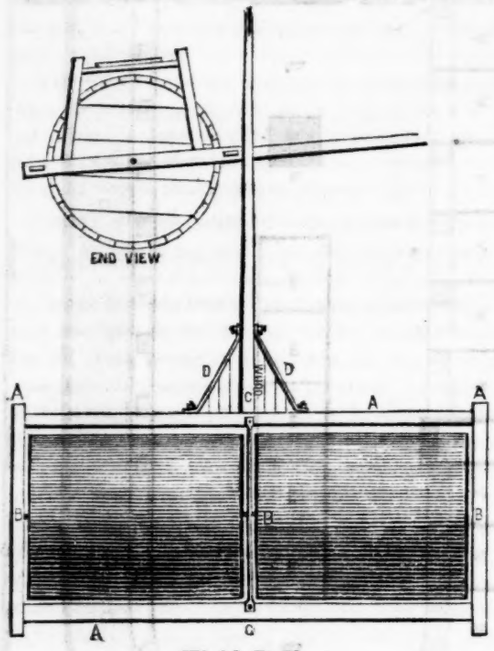
Great Crop of Corn.

Editors of the Country Gentleman—I send you a statement of my neighbor, Mr. Geo. Fowler's crop of *sowed* corn. The corn was sowed for the purpose of feeding his cows; but owing to the rapid growth, and partly for an experiment, he let it ripen. He says—"the ground consisted of two acres—had been 13 years in meadow—underdrained. I covered it with coarse barn-yard manure, twenty ox cart loads to the acre. Plowed very deep the 8th day of June 1854—then put 25 loads (of 30 bushels) of green manure, or that which was made from cows the past winter—spread it evenly over the surface—then harrowed it well both ways. Next I took a two horse cultivator and worked the ground until no manure was discernable. My seed was yellow corn, soaked in warm copperas water 48 hours. I then dried it by roling it in plaster, leaving it 48 hours—until I was ready for sowing, which was the 12th day of June, when the seed was much sprouted. I sowed it with a machine; the rows were 30 inches apart, and the seed dropped in drills two and a half inches distant. It was up in 4 days. It continued to grow rapidly. I run the cultivator twice in each row, and hoed it once. I had on the two acres, five hundred *shocks;* each shock averaged one bushel of ears; and the stalks weighed after being husked, forty pounds. The corn is worth 87½ cents per bushel—the ears short but very sound. The stalks worth 12 cents a shock."

To some this may appear as rather a "corn'd story," but the facts can be substantiated. Respectfully yours, Storrs Barrows. *South Trenton, Oneida Co., N. Y.*

Raising Calves.

Friend Tucker—Some inquiries being made as to raising calves, I give you my experience. I let them suck until they are two months old—halter-break them when one week old, and let them have as much milk as they will take twice a day until they are about four weeks old; then begin to wean them off by first milking one teat, and at the end of one week milking two teats, and so on until at last I give them but one teat once a day. As soon as I begin to wean them off, I commence feeding a few slices of carrots or some other vegetable, and induce them to lick a little corn meal, increasing the quantity as I deprive them of the milk. They will need the green vegetable, no longer, after they can procure grass. I always provide them with a small wisp of hay as long as I keep them up. To succeed well, and raise a fine animal, they should have from half, to a pint, of meal once a day, until they are turned out to grass at one year old. They should also be carded once a day at least, during the time of stabling. G. W. Durant. *Rensselaerville.*



Field Roller.

EDITORS COUNTRY GENTLEMAN—In a recent No. of your paper, you ask for information as to a good method of making field rollers. I had supposed that farmers in your section of the country, would, ere this, have had in general use the most improved kind.

I enclose you a rough pencil sketch of the plan of one I had made to order last fall, by Mr. Bowen of Montgomery, Hamilton county, O., who makes them only to order I believe—price $25.

I think the plan a very good one, but having as yet but little experience in field rollers, I am not prepared to express an opinion as to its comparative merits. The advantage of having double rollers is, that in turning, the two, by their forward or backward movements, accommodate each other, and thereby prevent the scraping that a single roller must produce.

I have often thought that for pulverizing hard cloddy soils, a roller or crusher made on the above plan, with the addition of strong wooden pins of proper length, inserted into the surface of the cylinders, would be very efficient and useful, after operating with which the use of the ordinary roller, or perhaps the harrow and then the roller, would leave the soil in fine condition. W. C. PINKHAM. *Loveland, Clermont Co., O.*

EXPLANATION.

A. A. A. A. Oblong frame, made of 4 inch stuff.

B. B. B. An iron rod, made fast in the end pieces of the frame, and passing through the rollers, serving the purpose of an axletree on which the rollers turn.

The rollers are made of oak, the heads being one inch plank doubled, on which are nailed staves of three inches in width and two inches thick.

Size of each roller, 4 feet long and 3 feet diameter. In the heads of each roller are inserted cast iron boxes in which the iron rod or axletree plays.

C. C. An iron bar, about ½ or ¾ of an inch thick, passing between the two inner ends of the rollers, with a hole in it, through which the axletree passes, and twisted near the ends so that it may be bolted to the frame flatwise, on the upper side of the frame in front, and on the under side of the rear frame—the edge between the rollers perpendicular.

D. D. iron bars. In the end piece of the main frame, are inserted two posts, with a cross piece 5 or 6 inches from their tops, on which to place a board or plank, which may answer as a seat for the driver, or on which may be placed additional weights if required. These are not represented in the principal figure, but are shown in the "end view."

Culture of Millet.

MESSRS. EDITORS—In your *Country Gentleman*, you ask for information in regard to millet. During the past winter, I wished to know something more about the crop, and addressed letters to several individuals in relation thereto. I send you enclosed, two letters on the subject—one from A. Y. MOORE, Esq., the President of our State Ag. Society, and the other from S. M. BARTLETT, Esq., one of the Executive Committee, both superior farmers. I send you these letters as they are, considering them valuable, and because I have not time to re-write them. J. W. DICKINSON. *Hillsdale, Mich., March* 25, 1855.

Schoolcraft, Feb. 3, 1855.

J. W. DICKINSON, Esq.—I received yours of the 29th ult. yesterday, and am happy to give you all the information I can in relation to the millet crop. It has, indeed, been a favorite crop with me, for the last five or six years. This year, I have less of it than usual and am very sorry for it. There is no kind of hay that my stock, of all kinds, prefer to millet, and if the land is rich, and it is well put in, and good seed, it produces well. I have had as much as four tons to the acre. After it is taken off in the fall, the land is in good order for wheat, by being once well plowed, not yielding quite so heavy a crop as a summer fallow, but quite good.

I will now give you my process. I plow early in the spring, at the time that I plow for oats or corn—harrow once—then after oats are sowed, corn planted, and other work done up, say from the first to the tenth of June, plow the ground again, harrow well, and sow about 12 quarts seed per acre; harrow well again, and it should be rolled, in order to make a smooth surface for mowing. It comes up slow and fine, but grows very rapidly in hot weather, say July and August. It is fit to cut in September, when the seed is out of the milk, or pretty solid. It does not hurt by standing, even till frost comes, except that it loses seed. Some folks cradle and bind it in sheaves, but I prefer to mow it, and put it in cock green; let it cure in cock; it may want airing, but put it in cock again to undergo the curing process. If it should rain and get wet, open the cocks till dry, and put it up again. It is a very rich nutritious feed, in consequence of the abundance of seed, which all kinds of stock are fond of.

I am feeding, this winter, some drilled corn, which I like very much. I drill it in rows 3 feet apart, and 6 or 8 stalks to the foot. Cut it up, and put it in good shock when ripe, and let it stand till winter when wanted for feed. It keeps better that way than any other, and is much less trouble. A. Y. MOORE.

Lasalle, Feb. 1, 1855.

DEAR SIR—I take pleasure in answering your inquiries concerning millet.

1. As a green crop for soiling, it is scarcely equal to corn; but still it is good.

2. For hay (cut when seed is half ripened), it is superior to any crop I have ever tried. May be made, on rich land, to yield from 4 to 6 tons per acre—excellent, when well cured, for horses; they are particularly fond of it. Cattle prefer it to best timothy or clover. It should be carefully cured, being, from the extreme succulence of the stalk, very liable to mould in the mow. It should be cocked as soon as fairly wilted, (to prevent waste,) and allowed to stand at least four days; then open it a few hours to the sun, before draw-

ing. The first sweat is thus disposed of, and there is but little danger of injury from rain, when put up green, as it packs closely.

3. The averaged quantity of seed I think should be 12 quarts to the acre. The richer the soil, the more seed when grown for hay. If sown thin on such land, it grows too rank and coarse. I have not tried it on poor land, or even light land, but am told it does well on such soils. I should prefer a good corn stubble, potato, or other well tilled land.

The millet shelled from a crop cut for hay, is not fit for seed—a portion of your field should be fully ripened for this purpose. I can furnish all the seed you want. I introduced this crop here. I am greatly pleased with it. If cut for hay, the mowing machine does it finely—for seed, use the cradle.

I have been feeding my entire stock on this kind of hay for the last fortnight, and all seem satisfied, even the calves. L. M. Bartlett.

Top Onions.

Messrs. Editors—I have several letters from your state within a few days inquiring about top onions. And to save work and letter postage to write to all, permit me to do it at once through your paper.

1. The top onion seed has the shape of an onion. Its bigness is from that of a kernel of corn to a dove's egg. The same onion may be set out for seed year after year. But if you wish to raise a large good onion to use or sell, plant the seed.

2. Sow the seed as early as you can work the ground They will have ample time to grow, planted in July; but like leeks they grow best in April. No matter how much snow falls on them or if the ground should freeze, it only seems, afterwards, to hasten their growth.

3. Plow your ground, put on the top, well rotted manure, sow on ashes, harrow or rake thoroughly, row it out about 8 inches apart, place your seed from two to four inches apart on the row, cover the seed a little out of sight, so that perhaps the first shower will bring many of the seeds a little in sight, tramp on the bed as much as you please while you are making and sowing, especially on the row after the seeds are sown.

4. After planting the seed, sow on common salt, which you can find in old fish barrels in the stores. When your onions are well up and growing it is well often to take ashes and plaster, and while it rains, or a little after a shower, throw it up into the air and let it fall in fine dust. A little will do.

5. Never hoe deep lest you should disturb the roots as they are very near the top of the ground.

6. Gather them as soon as the top is fairly wilted. If you do not they will start to grow again and burst. Some tell us this kind of onions are tough and strong. But it should be known that the reason of that is, that they are left in the ground after they are ripe. Gardeners who have known them for 20 years write for seed and tell me they prefer this variety because they are *sweet*, *tender* and *juicy*.

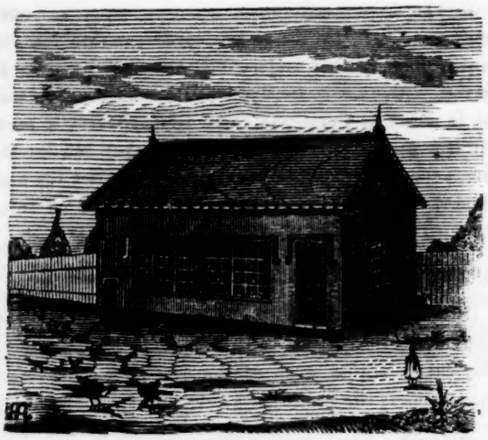
7. When ripe gather and keep them, both onions and seed, in a dry place. Never leave them on the damp cellar bottom. If you have planted them in season and as I direct, you may raise from 600 to 1000 bushels per acre. I often have them over a foot round.

8. The three great advantages over other varieties are these. The top onions are earlier, so that you can supply the market before *other* people have them grown. Another is, that you can hoe 14 times as many in a day as you can of those from the black seed. At the first hoeing you have no weeds; besides the blade [one] or spear is large and you can see the row. And the other reason is, that you will never be troubled with maggots. S. Morgan. *Bristol, Vt.*

Why Plaster is not Always Beneficial.

I understand plaster to be a sulphate of lime, i. e. the base is lime united chemically with sulphuric acid. My theory is that when plaster does no good, the soil has already its quantum of something analagous to sulphuric acid. For instance, on the sand lands about Dunning Street, in this (Saratoga) county, formerly plaster was the making of the farmers. It would then make every thing grow, and they have been wondering for a year or two back, why plaster did not make clover grow as it used to. Their fields are covered with sorrel, the plaster has furnished the soil with an *excess* of acid, and sorrel grows better than any thing else. Now the remedy I believe to be *lime*, which will unite with and neutralize this excess of acid, and afford the same fertilizing power as plaster formerly did, at much less expense. The farmers have only to procure common stone lime from the nearest kilns, or air slaked will do. On light soils, let the lime be slaked before applying, but on cold clayey soils, it may be beneficial to apply in the stone, and let it heat up the soil. It will loosen a heavy and lighten a sandy soil, and where it does not already naturally abound, is a necessary addition, especially if you want to raise wheat. It will stimulate *all* the crude organic elements to action; but it is important to remember that when you have put this stimulant into *light soils*, containing but little nutriment for plants, you must not expect its good effects to continue unless you feed your soil with manure, or muck, or leaves, or something else; no more than you would expect a hungry man to keep on working without food. But draw on your chip dung, muck, leaves or other stuff, and your lime will continue to keep it at work to the best advantage, for years. Putting on the lime gives the *appetite* and strong *digestive powers*. It will eat anything, but cannot work on with nothing long. Your hungry man will soon be worked out, without food; but don't give him the appetite and good digestion, and work him hard and then refuse to feed him. If any body has a better theory let us have it. H. Van Ostrand. *Rock City Mills, N. Y.*

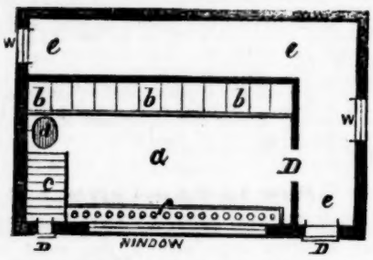
Peruvian Guano, *vs.* Superphosphate of Lime for Oats.—The *Southern Planter* gives the results of some experiments with oats. 200 lbs superphosphate gave 704 lbs. of oats. 200 lbs. of Peruvian guano produced 1556 lbs. At 35 lbs. per bushel this would be, with superphosphate 20 bushels: with guano 44 bushels per acre. We are sorry the yield, *without any manure*, is not given.



Poultry House.

A correspondent of the *People's Journal*, furnishes the following plan of a Poultry House:

Fig. 1, is the exterior, fig. 2 the ground plan; *a* is the feeding room, *b*, *b*, *b*, the nests, *c* the passage to the roosting-place, which is up in the loft above, *f* the feed box, the top of which is hung with hinges, and holes cut in the top, which enables the fowls to feed at leisure and not to waste their feed; the box or trough can be filled up, which will last them several days; *e*,



the passage by which the eggs can be removed from the nests without disturbing the fowls; each nest is to have a small sliding door into the passage-way, by which means you can readily get at the nests. A house of this description 8 feet wide, by 12 feet long and 8 feet high, will accommodate from 50 to 60 fowls.

The best situation for a house of this kind, says the *Journal*, would be in a bank fronting south, and by this means you can have fresh eggs all through the winter, for if fowls are well sheltered from the cold and storms, and well fed, they will continue laying all the winter; the floor of the feeding room should be kept covered with sand, pounded oyster shells, and lime; you may also have a yard in front, with a high picket fence around it, by which means you can shut up your fowls at pleasure.

Best Fowls—Large Eggs.

MESSRS. EDITORS—I have raised within the past few years, almost all the large varieties of fowls; but I have found none that suit me as well as the cross with the Jersey Blue and Shanghai. I think they are unsurpassed by any, either for laying, setting, brooding, or table use. Some of my last spring pullets weigh from 7 to 9½ lbs. If any readers of the *Country Gentleman* have tried the above cross, I should be glad to hear from them.

Hold on Madagascar, and let Ohio speak—I have two specimen Shanghai and Jersey Blue eggs. The measurements of the one, 8½ by 6⅝ inches—of the other, 8 by 6¼ inches. H. S. *Greenfield, O.*

An Honest Word about Chittagongs.

MESSRS. EDITORS—In answer to the queries of J. W., allow me to give my experience in the matter May, 1853, saw me the proud possessor of two coops of Grey Chittagongs, just arrived from *the land of wooden nutmegs*, from celebrated dealers whose names are not unknown to the columns of the Cultivator. One coop, I was assured, were sent at a rate below the market price, and was politely requested to make up the *balance* by way of a "puff" in some agricultural paper. My pleasure was enhanced, on waking the next morning, to hear the two cocks crow a *race*, making a noise somewhere between the braying of a jackass and the bellowing of a mad bull, and rivaling the cackling of the geese that foretold the downfall of Rome. The hens will lay about thirteen eggs to a litter, and then they are *bound* to set, right or wrong. The weights given by J. W. are fair weights for this breed. From four to ten weeks old, the chicks are mostly destitute of down or feathers, looking as if prepared for the pot, and a cold rain makes sad havoc among them. The first six months they run to *legs* and *bones*, are very poor and blue, with so tender a skin that it is next to impossible to dress them fit for market. In fact, their *long, bony legs, gaunt, blue bodies*, and *torn hides*, make a sorry show. They are voracious eaters, one requiring as much as two common fowls, and being essentially a lazy animal, and opposed to the locomotive tendencies of the age, are good for nothing to hunt their own fodder. But when winter

> "——holds the sun
> A prisoner in the yet undawning east,
> Short'ning his journey between morn and noon,
> And hurrying him, impatient of his stay,
> Down to the rosy west"—

Then, on account of their thin covering of feathers, and long, fleshy toes, will *they suffer* and their *owner lose* most severely. Toes freeze and come off, leaving a leg and stump of a foot which resembles Powhattan's war club as seen in Barnum's museum. Being a tropical bird, perhaps they are not fully acclimated, or do not find their proper food here; be that as it may, it has been observed that they thrive here best during the prevalence of a certain kind of *bug* not mentioned by naturalists. VERMONTER.

Treatment of Roup.

Roup is the most obstinate disease we have to contend with. It in most cases attacks fowls from October to April. The first symptoms are a difficulty in breathing; then a weeping at the eyes, together with a swelling of the head; a discharge of fœtid matter from the nostrils ensues, and the fowl pines away and dies, unless taken in hand on the first appearance of the disease. Many are of the opinion that it is very contageous. Those affected with it, should be removed to a warm, dry, ventilated room, and treated as follows: Squeeze each nostril out by pressure with the thumb down towards the beak, which will remove all the discharge; then sponge the head with assafoetida dissolved in vinegar, and squeeze a drop or two in each nostril, and finish by *tarring* or well greasing their heads from above the nostrils back to the top of the head, and keep them tarred until relieved. One or two applications will generally suffice. Finally, it is best to kill the fowl if it does not recover immediately. JONATHAN RAMSEY. *Middletown, Conn.*

Alderney Milk.

MESSRS. EDITORS—The communication of Mr. PRENTICE, in your paper of 1st inst., has led me to-day to weigh the product of 163 lbs. 14 oz. *Alderney* milk, and the result is 13 lbs. 14 oz. butter, or 1 lb. of butter for 11¼ lbs. milk. This is a fraction more than from the *Ayrshires*. The manager of my dairy had not seen Mr. PRENTICE's communication, nor did he know my object until the result was ascertained.

During the cold weather, in addition to hay, my cows are fed daily with from 1 to 3 quarts of *bran* each, in warm water. I do not think this adds to the weight of the milk, but it probably does to the quantity, and it certainly tends to keep them in good health.

The result both with the *Alderneys* and the *Ayrshires*, is more favorable than I had supposed. I have always, when inquired of, replied that about 7 quarts of milk or 14 lbs. in weight, would produce a pound of butter.

I send a specimen of the butter made to day for your inspection. JOHN T. NORTON. *Farmington, Conn., March* 19, 1855.

Mr. NORTON will please accept our thanks for the above, as also for the box of beautiful and delicious butter which accompanied it. It will be seen that the product is a trifle more than in the case of the Ayrshires heretofore reported by Mr. PRENTICE; and both statements fully substantiate all that has been said in relation to the richness of milk from these breeds of cows.

Food for Ewes and Lambs.

I would inquire of you through the CULTIVATOR, what I shall feed to sheep to make them give milk. I have lost a number of lambs this month. My sheep did not give any milk, and they would not rear the lambs. I have fed them oats and corn through the winter, until they began to lamb, and then I fed them potatoes. Now can you tell what is the best feed to make them give the most milk? If you can you will oblige WM. E. WHEELER. *Warren, N.Y., March* 26.

When sheep have been well wintered as yours appear to have been, we have rarely found any trouble from a deficiency of milk. The severe weather of the past month has probably had much to do with your difficulties. When a ewe has yeaned, she should be immediately separated from the rest of the flock for a few days, and she will then seldom or never disown her lambs. When ewes have couples, they will frequently disown one of the lambs, but by placing them in a pen by themselves and holding the ewe while the discarded lamb sucks, for a day or two, she will take to it. Good hay, shorts, cabbage, mangel wurzel or ruta bagas, as you may chance to have them, are the best food for ewes. Unless lambs are raised for the butcher, it is best not to have them come till there is a good bit of grass for the ewes. We have never found any roots or grain that would make as much milk as good grass. Rye is frequently grown in England as a green food for ewes and lambs in the spring; but we do not approve of the practice. It is on the wane in Great Britain, on account of its exhausting effect on the soil. Cabbage, in our experience, is better than ruta bagas, mangels or beets, for ewes and lambs. In fact we know of nothing, except grass, that will produce so much milk, or at least that enables the ewes to support their lambs so well. Will our correspondents give us their experience in regard to the inquiry of Mr. Wheeler.

Diseases of Cattle.

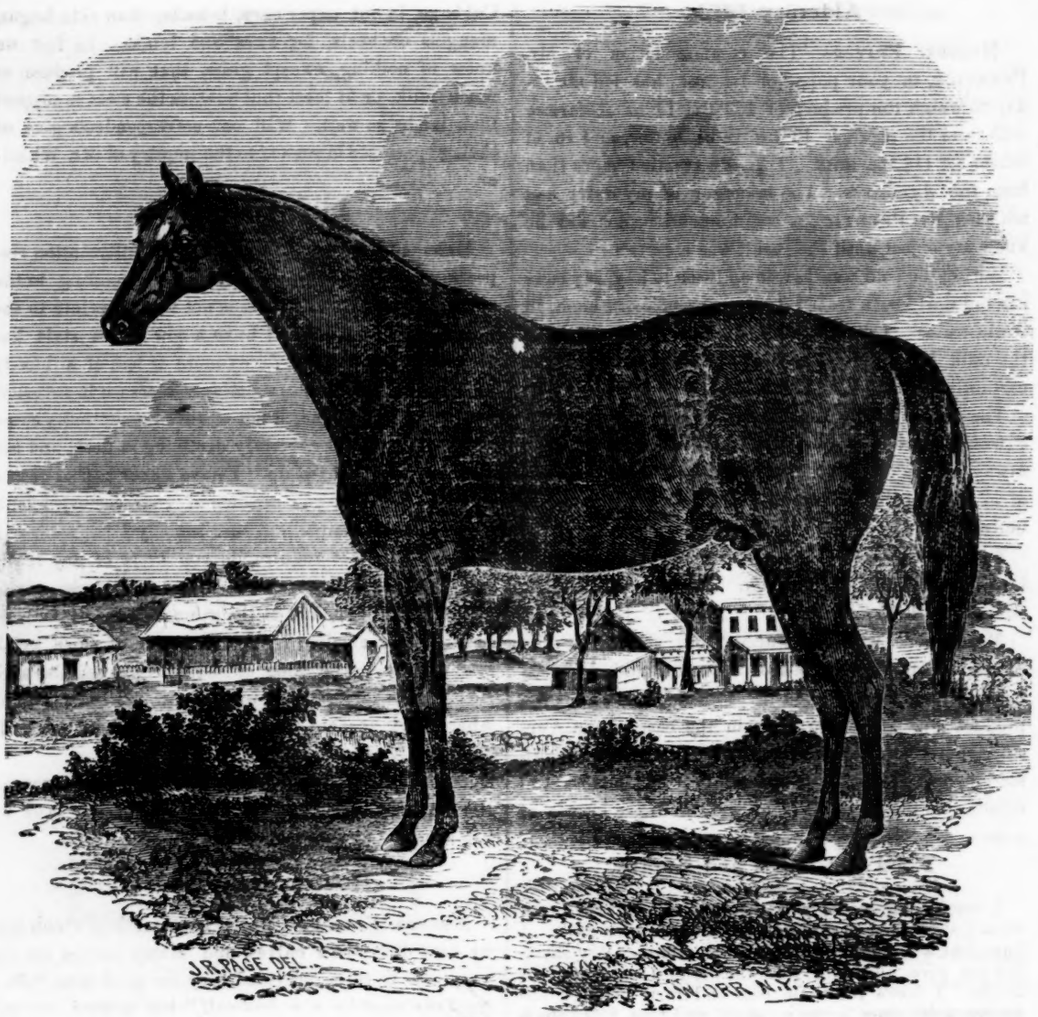
MESSRS. EDITORS—I suppose that information respecting disease in domestic animals, extending to the cause, prevention and cure, is not inappropriate to the design of your paper. I have a cow whose stale has for some time past exhibited more or less of a bloody appearance, the disease seeming to increase in severity, and will I apprehend, if not removed, eventually cause her death. She is evidently declining in flesh, and her milk has nearly dried up. I have never had or seen a case like it. Can you or some of your correspondents direct to some simple and sure remedy?

I would further inquire, do you know of any really good book that treats of the diseases of stock—plain, simple and cheap, and at the same time clear, comprehensive and efficient? Every owner of stock needs such a book, if the thing exists, and you will be entitled to our thanks if you will inform us what it is, and where, and at what price it is to be had. E. S. F. *Gilsum, N. H.*

DADD'S "*American Cattle Doctor*," comes nearest the requirements of our correspondent of any book we are acquainted with—price $1.

How to Raise Calves.

MESSRS. EDITORS—March is a month in which many cows drop their calves, and March calves are the very ones to raise, provided they are good ones, "for a good cow may have a bad calf," but a good cow will be more likely to have a good calf, than an ordinary cow. My practice is, to let the calf have what milk it will take for the three first days of its existence; then allow it to suck one-half of the milk until it is three weeks old; by this time you can decide upon appearances whether it has such points as you desire in an animal of that age; but if the calf is doomed for the shambles, give it all the milk for two or three weeks more, and it will find a ready market; but if to be raised, continue to allow it one-half of the milk until it is eight weeks old, during which time it can be learnt to eat a half pint of meal a day, with a little fine hay; then it will do to confine the calf to one teat, with an increase of meal; and at the expiration of three months, it will do to deny it milk, provided you supply it with a suitable quantity of meal and good hay, or grass, three times a day, and what water it desires. Do not turn the poor calf out to shirk for itself, in a poor pasture, but give it a good stable, that can be made dark during hot days, to prevent the flies from tormenting the creature, and save it from the rays of a vertical sun, which it will avoid if possible. The last of September, if you have good aftermath, turn your calves on to it, and with plenty of pumpkins through October and November, with a regular supply of hay and roots the following winter, you may rationally expect to show as good a yearling, when March comes round again, as your neighbors. S. D. WALBRIDGE. *North Bennington, Vt.*



Monarch.

This celebrated horse was bred by his late Majesty William IV. at the Hampton Court stud in 1834, and imported by Col. WADE HAMPTON of South Carolina. He was by Priam out of Delphine, &c. &c. Monarch was exhibited at the last New-York State Fair, and received the first prize as the best thorough-bred horse. He is now owned by Col. L. G. MORRIS of Fordham, and is to be kept, as will be seen by an advertisment in this paper, at Mr. M.'s Herdsdale Farm, the ensuing season.

National Sheep Show.

At a public meeting recently held at the village of Bath, Steuben Co., N. Y., a "Wool Growers' Association of Western New-York" was formed and a constitution and by laws adopted. The Society have resolved to hold a "National Sheep Show" at the village of Bath on the 29th, 30th and 31st of May 1855. The following is a list of the premiums offered.

FIRST CLASS.—Sweepstakes Pen, best 10 fine wool Ewes, $75. Best fine wool Buck over two years old, $50; 2d do, $40; 3d do, $30; 4th do, $20; 5th do, $10.

Awarding Committee—Wm. Wheeler, Wheeler, Steuben Co.; Hector Hitchcock, Conesus, Livingston Co; J. L. Monier, Naples, Ontario Co.

SECOND CLASS.—Best five Ewes with Lambs, fine wool, $30; 2d do, $20; 3d do, $10. Best five Ewes two years old, $20; 2d do, $15; 3d do, $10.

Com.—Alex. Arnold, Avoca, Steuben Co.; Wm. D. Dickirson, Victor, Ontario Co.; —— Chilson, Pavilion, Wyoming County.

THIRD CLASS.—Best five Ewes one year old, fine wool $20; 2d do, $15; 3d do, $10.

Com.—Solomon Hitchcock, Conesus; Calvin Ward, Richmond, Ontario;—— Galentine, Rush, Monroe.

FOURTH CLASS.—Best Buck two years old, fine wool, $30; 2d do, $20; 3d do, $10. Best Buck one year old, fine wool, $20; 2d do, $15; 3d do, $10.

Com.—Loomis Bunce, Milo, Yates; C. D. Champlin, Urbana, Steuben; Nathan Squires, Penn Yan, Yates.

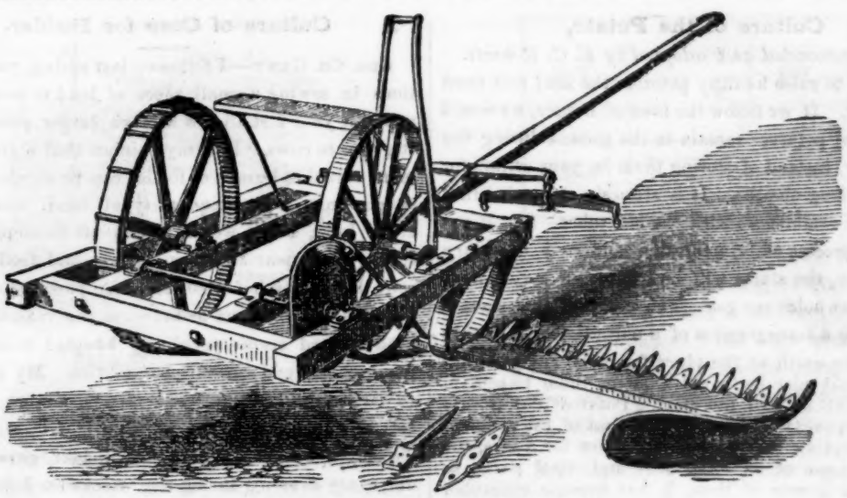
No Sheep will be allowed to compete for more than one premium except in the Fifth Class.

FIFTH CLASS.—Best single Ewe, fine wool, $10. Best 3 Ewes, fine wool. $15.

Com.—Daniel Gray, Wheeler; Wm. A. Cook, Lima, Livingston; G. H. Wheeler, Wheeler.

This Class may be drawn from any of the foregoing pens.

Any person may become a member of the Association by the payment of $1. The following are the principal officers for this year:—*President*—WM. BAKER, Urbana; *Cor. Sec'y*—WM. B. MCKAY, Bath: *Rec. Sec'y*—ROBERT B. WILKES, Bath; *Treasurer*—Hon. REUBEN ROBIE, Bath. There are also thirteen Vice Presidents and several Corresponding Secretaries.



Russell's Mowing Machine.

In the last volume of the COUNTRY GENTLEMAN, we gave some account of the peculiar construction and advantages of this machine. The above engraving, however, will enable our readers to obtain a clearer conception of its design, and to form their own conclusions of its merits. It consists of a square frame mounted on two wheels, —one, a heavy cast-iron wheel from which the power is derived, the other a light one, placed on the opposite side of the frame, and a little forward of the main wheel. The object of this second wheel, is to prevent the knife bar from dragging too heavily on the ground, and to alleviate the side draft. In connection with this inner wheel, is an apparatus whereby the driver can raise or depress the knife bar at pleasure. *The vibratory motion of the knives is obtained by means of a cam wheel*, placed on the same shaft with the pinion connected with the main wheel. Each knife is placed upon the knife-bar independent in itself, moving on a center pivot by means of an iron rod passing under, and attached to the back end of the knives, giving them an oscillating motion, and effecting a drawing, circular cut. The knives are *double*—that is, they have a cutting edge at each end, and by removing the cap which secures them in place while at work, any one can be removed and another substituted in its place, or the ends can be reversed, when one edge becomes dull.

The machine is made for one or two horses, the former cutting a breadth of three feet, and the latter from four feet four to four feet eight inches. Trials were made with it last year in this and other states, and it appears to have given very general satisfaction.

Value of Stable Manure.

Can you inform me how many tons of the best stable manure, from *grain fed horses*, is equal to one ton of best Peruvian guano? It is probable this, or a similar question, may have been frequently answered, but I am unable to find it in any of your valuable publications. ROBERT WATSON. *St. Stephens, N. B.*

The value of stable manure depends on the composition of the food consumed by the animals, and on how much of the liquid excrements is retained, and on the quantity of litter used, besides other circumstances too numerous to mention. It is, therefore, difficult to get at the average value of stable manure as compared with Peruvian guano.

The value of stable manure as compared with itself, is in proportion to the ammonia it contains, for the more ammonia it has, the more phosphoric acid and other valuable mineral substances does it contain. Some will question the truth of this statement, but it is nevertheless true as a general rule. As compared with Peruvian guano, the chemically fertilizing value of stable manure may also be estimated by the ammonia it contains, since the guano contains nearly if not quite as much phosphoric acid in proportion to the ammonia, as the best stable manure, and the *availability* of the elements of the guano, is in our opinion a full offset to the other mineral matter of the stable manure.

A ton of "farm-yard dung," according to BOUSSINGAULT, contains nitrogen nearly equal to 10 lbs. of ammonia; that from an "inn yard" 19.2 lbs. of ammonia More recently, from several analyses, LAWES & GILBERT found a "ton of rich box manure" to contain 5½ cwt. of dry substance and nitrogen, equal to 20 lbs. of ammonia, while another sample, composed principally of rotted straw, contained nitrogen equal to only 5 lbs. of ammonia. A ton of liquid and solid excrements, free from straw and other adventitious matter, from a horse fed with oats and hay, BOUSSINGAULT found to contain nitrogen equal to 13¼ lbs. of ammonia, and 78¼ lbs. of mineral matter.

From these data, which are perfectly reliable, our correspondent can draw his own conclusions. A good Peruvian guano contains 16 per cent of ammonia, or a ton would contain 320 lbs. If all the liquid excrements are saved from your "grain fed horses," and little litter is used, and the manure heap has not been reduced by fermentation; in other words, if your stable manure is fresh, it probably contains about as much ammonia as that analyzed by BOUSSINGAULT—13¼ lbs. per ton. The figures, then, lead us to the conclusion that 23¾ *tons of fresh stable manure from grain fed horses, is equal to one ton of the best Peruvian guano.* By judicious fermentation, a considerable quantity of carbonic acid and water may be driven off, and the residue be left with a larger proportion of ammonia, in which case a fewer number of tons would be required to equal a ton of guano.

Culture of the Potato,

As recommended and adopted by E. C. Roberts.

In order to raise healthy potatoes the seed root must be healthy. If we follow the laws of nature, we would say let your potatoes remain in the ground during the entire year, instead of storing them in your cellars for five or six long months. It is strongly contended that the disease commences with the old tuber—that it undergoes a process of fermentation, and as a necessary consequence, the stalks wilt and throw off a very noxious and unwholesome gas. The cause of this disease seems to be a transgression of a natural law. Nature designed the earth as the place for roots, and man has made a great mistake in not allowing them to remain there but about half the year. Potatoes deteriorate rapidly in quality by keeping them out of the ground; and by adopting this course of culture for years, the root loses some of its component and vital parts, so that, in the course of time, it has become enfeebled and lost its native vigor.

Mr. ROBERTS gives the following directions:

"To get seed roots, select one fourth acre of arable land, (on which water will not stand) on an eastern slope, new land is the best for this use, fit early in the spring; furrow four or five inches deep, and two feet apart. Select seed roots that are about the size of a hen's egg, that have touched the ground during the previous winter. Do not cut them; drop one every six or eight inches apart, in the furrows; cover them by filling the furrows, and then put a top dressing of two inches of straw, or forest leaves on each row. When the tops are two inches high, pass between the rows with a shovel plow; follow with a hoe destroying the weeds, and levelling the ground; do not hill. You have nothing more to do until fall, when the ground begins to freeze; then cover with half rotten straw, chaff or forest leaves, three or four inches deep. Your potatoes will now have a chance to ripen and rest during the winter.

I shall now direct you in planting for culinary use, next season. The spring following, before your potatoes sprout, you will plant another seed patch, as above directed. You will now take the residue, and plant a field crop for culinary use. Plant in drills, four or five inches deep, and three feet apart; drop a potato every eight or ten inches, cover by filling the furrows; cultivate or hoe twice. In this way you will get the greatest yield, and best quality. Continue a similar practice from year to year, and from my own experience, I believe you will find your potatoes yearly increasing in yield and quality.

The third year you may increase your field crop, by plowing in fine manure. You have now had nature's course pointed out to you; her laws are truths; and I humbly believe, I have given them a just exposition. All who follow my directions, will the second year, see many seed balls, on the vines in their seed patch. These may be planted in the fall as I have done, and cultivated carefully, and good will undoubtedly result from it, if pursued in nature's own way. The potato will grow wild in our forests if planted in them, and thus save those the trouble, (who wish to get the wild root,) of resorting to their native forests in South America. Finally, we may apply nature's laws profitably to most other products. Seed of every variety, should be fully matured, i. e. not harvested until fully ripe. That which approaches the nearest to perfection should be selected for seed, and all roots for seed purposes, should remain in the ground, where they grew, until they bear seed; this course will make the seed mature earlier, and make it the most perfect of its kind."

I consider Mr. R.'s theory of great importance. I shall thoroughly try it, and hope others will. J. W. DICKINSON. *Hillsdale, Mich.*

Culture of Corn for Fodder.

EDS. CO. GENT.—I followed last spring, your directions in sowing a small piece of land to corn fodder, and this year I shall sow a much larger piece. I fed it green to cows. It is my opinion that a greater and more valuable burden of fodder can be obtained in this shape, from a given quantity of land, than in any other form, and I would advise all farmers to try a small piece near the barn, to cut and feed to milch cows during the hot weather, when pastures are so apt to dry up and become as brown as the roadside. This kind of feed seems peculiarly adapted to cows, from its succulent and saccharine qualities. My cows used to eat it so clean that frequently no vestige would be left to indicate that the animals had been thus fed. Twenty-five square rods of corn fodder, gave me fodder every evening during four weeks for 3 cows, when the drouth had almost entirely cut off the supply of grass in the pasture; yet my cows were kept in good condition, and fell off but very little in their milk beyond what might naturally be expected in hot dry weather. Where pasture for cows is limited, nothing can so well supply the deficiency as a piece of corn planted for fodder. As to curing it for dry fodder, I have no experience; but presume it can be done with advantage by a careful hand, guarding particularly against the liability to heat when it is gathered in quantities. For horses that are kept during the summer, I should think soiling with green corn would answer well. Hogs will eat with great relish, and I should think profit, the leaves and stalks thrown into the pen. H. L. YOUNG. *Po'keepsie.*

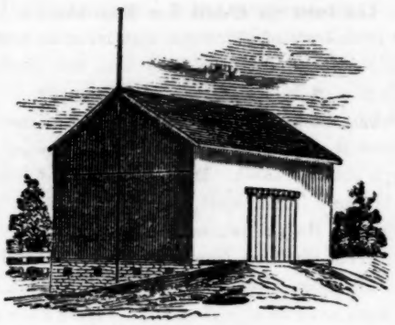
Rolling Fields.

MESSRS. EDITORS—I was formerly in the habit of rolling my fields after the manner you recommend on page 165; but having devised what I think a better way, I will give it for the consideration of the brotherhood.

My plan is to commence on one side of the field, running at right angles with the lands as they were plowed, to the opposite side, turning the roller so as to describe a semicircle, whose diameter shall be four times the length of the roller, being about as short as an ordinary log roller will turn easily; then pass across the field parallel with the first track made with the roller, surrounding a strip (if the roller be, say eight feet,) of about two rods—pass back on the opposite side of this strip and next to the first track, turning at the end as before, which will bring the roller on the opposite, or field side of the second track, and so on until this strip is finished, which will have doubled its original breadth.

Proceed in like manner with the balance of the field, finishing by rolling once round on each headland. This method allows of easy turning at the ends, being always the same, and crossing the lands does the work more perfectly than rolling with them, as must be the case with half the field in going round it.

This method is much easier shown than described, but I think any one who may wish will be able to comprehend it on trial, and will also be satisfied of its superior advantages. C. *Amsterdam, N. Y.*



Side-Hill Barn.

Mr. Tucker—I noticed in the *Country Gentleman* recently, that a correspondent wishes a plan for a side-hill barn, with threshing floor on a level with the entrance, 10 feet above the ground floor. Now I would advi e him to build his barn broadside to the hill, for the re son that it will be less expensive and more convenient. If he should approve of the suggestion, I will offer him a plan.

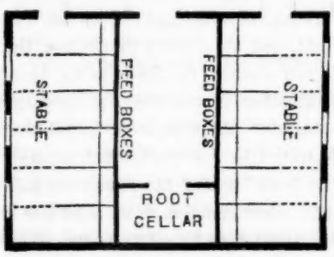


Fig. 1.

Fig. 1, represents the ground plan, 44 feet long and 32 feet wide, 10 feet high—one stable on each end, 14 feet wide, which will give a feed manger 3 feet wide, and a good wide passage in the rear of the animals also; divided into 6 stalls 5½ feet wide, each will stable 12 animals, which are to be fed from a space corresponding in width with the manger, on a level with the floor, as will be seen in the floor plan Fig. 2. This space

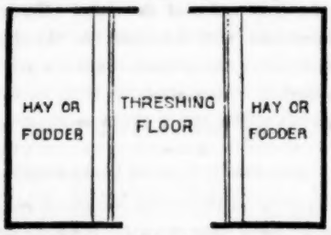


Fig 2.

for feeding from the floor, is made by leaving a space 3 feet wide at the bottom of the bay on a level with the floor, and inclines towards the floor to a bay beam 6 ft. high from the floor, so that the space abstracted from the bays is but little. This space can be closed or opened at pleasure by having doors to swing down to the floor when open, or to shut towards the mow when required to be shut, as will be seen in Fig. 3. [We prefer hanging these doors by hinges at the top, swinging towards the bay, so that their weight shuts them, and pushing a fork of hay against them, opens

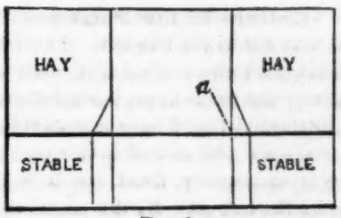


Fig. 3.

them. Eds.] The dotted line at *a*, is the side of the bay, inclined, to show the manner of feeding from the floor, and then it can be closed at pleasure. It should be fastened by hinges about 2 feet high from the floor.

Having a barn nearly on the same plan, I thought it might please some of your numerous readers. B. D. C. *Red Hill, Fairfax Co, Va.*

Successful Plum Growing.

Mr. Tucker—In compliance with frequent solicitations, and in answer of repeated inquiries, I beg leave to introduce through your papers, my experience in cultivating the plum. What with black knot, curculio, and other natural causes to discourage the cultivator, it had become a settled matter of fact that plums could no more be raised in this vicinity. I attribute my success mainly to a hereditary strain of Yankee principle, producing a strong propensity to use a Jackknife. My trees are mostly grafted on to suckers of the native or wild plum, near or at the surface of the ground. The scions take well in such stocks, and grow strong, frequently from four to seven feet in a season. In the spring of the first year, I cut back to two or two and a half feet, and each spring following, from ½ to ⅔ of the last year's growth. This causes them to grow stocky, with low bushy heads, and to set thickly with fruit spurs. I have trees in different varieties of soil; some in cultivated, some in grass land. All do well. I manure with what is most convenient, without regard to kind or quantity, long or short, stable or hog manure, ashes, old lime, soap suds, fish brine, chip manure, or whatever is at hand, plowed in or for top dressing.

The great enemy of the plum tree is the black knot. Now comes the grand question—Black knot, what is it? Is it a disease, or the work of an insect? I will endeavor to answer these questions according to my observations. I consider it to be the work of an insect with which I have no personal acquaintance except in the maggot state.

From frequent observation combined with practice, I find that June is the time to look for the enemy. There are no black knots then, of this year's growth, but simply swellings upon the branches. Now use your jack knife, and you are sure of your foe. When these swellings first commence, so as easily to be found, the insect is the exact color of the excrescence, and so small as usually, to escape detection. Nevertheless he is there. From the middle of June to the 1st of July, they are easily found, generally two in a knot, varying from 1-20 to 3-8 of an inch in length—the largest in the mean time are leaving their cells. I have found

them near by, sheltered by the rough bark, covering themselves with a thin silk-like web. To all who wish to raise plums, (and who does not ?) I would say, here lies the secret. Cut green knots, instead of black ones. By following this practice, I have succeeded in raising very fine trees—not a black knot is ever seen on them. A swelling is occasionally found, but it is taken in time to secure the maggot. By this means the insects are reduced to that degree that my trees never suffer thereby. I have trees from 4 to 6 years from the graft, from 8 to 10 feet high, with large spreading heads, bearing the first season from 1 to more than 2 bushels per tree, of most splendid fruit, as many a satiated appetite can testify.

With your permission I may give in season, my experience and success with the curculio. C. S. *Shelburne, Mass.*

Peach Blossoms.

I take the following paragraph from the New-York Tribune :—

THE PEACH CROP.—The temperature falls in Connecticut and Massachusetts to 12° to 15° below zero every few years, without injuring the peach crop. In 1834, at Windham, Conn., one morning, on the high hills the thermometer indicated 18° below, while on the plains and valleys it was 22°; yet there were plenty of peaches the following season on the hills, and none in the plains and valleys. A year or two after, the temperature, one windy night, was exactly reversed. The next year there was not a peach on the hills, but a full crop in the valleys; the tree-buds were not injured. Who will inform the public where the exact frost-line of the peach is? Another question to the curious is, at what temperature the peach-tree is killed by frost. The writer thinks it at 30° or 32° below. G. W.

The temperature in this village on the morning of the 6th ult., was 26° below zero, and the next morning it was at 28° below. Since then, I have examined the blossom buds of the peach trees at different times, and found only a part killed. At present the prospect is there may be much fruit yet; and I can discover no damage on the wood. As there are two conditions that influence the effects of intense cold on the peach buds, no particular degrees of temperature will probably prove destructive in different seasons. Much depends on the *amount of development;* for the blossom buds, *if not started at all,* appear to be as hardy as the leaf-buds, and both as capable as the trees, of resisting low temperatures. But the peach is a native of the Himalaya Mountains, and after having dropped its leaves, like some other mountain plants,* it begins to vegetate in the first warm air that surrounds it—whether that be in autumn, winter, or spring. Hence in this country the hills generally produce better crops of this fruit than the valleys. In many parts of New-York and Pennsylvania, the settlements were first made along the streams, the most unfavorable sites for the peach tree. In the same season that I saw a fine large one that had been winter-killed in Stroudsburgh, I saw another loaded with fruit on the high hills, far north of that place. These situations had been too bleak for the buds to start before spring had fully set in.

But when the buds have *started,* and the mercury sinks below zero, it may kill them, or it may not, according to circumstances. If warm sunshine† pours on them while in a frozen state, we should scarcely have any hopes of them; but, on the contrary, if thick clouds prevent the rays from reaching them, and the temperature slowy rises up to the freezing point, very little danger need be apprehended. I have known the buds killed when the cold was about zero, and I have known them to survive when it was many degrees lower. The amount of development,‡ and a clear or cloudy sky, explains all the causes of this difference. D. T. *Union Springs, N. Y., 3d mo* 15, 1855.

Many accounts from different parts of Western New-York, where the temperature has not been as low as 12° below zero once in twenty years, represent the late intense cold as low as 20° below. But there is reason to believe that during the night it was considerably lower. At Lyons, it was observed to be 34° below, about midnight, and at Auburn 36° below, the temperature about ten o'clock in the evening being about the same as at other places where no midnight observations were made. As a *general* rule, liable to exceptions, as stated in the preceding communication, nearly all the fruit buds of the peach are killed when the cold is 12° below zero—such at least has been the result of our observations for many years. Throughout a large portion of the western part of the State, the *wood* of large peach trees has changed to a dark brown, and are generally believed to be fatally injured. Below the snow-line, the wood is fresh and white, and the depth of the snow at the time is thus precisely indicated. According to former experience, but few of these trees may be expected to sprout up near the roots, and new orchards must be planted. There is no doubt that the *long continuance* of the cold contributed largely towards the destruction of the *wood*. The *gradual rise* of temperature was favorable to the *buds*, and hence instances often occur where buds are alive where the tree is killed.

Planting Ornamental Trees.

EDS. CO. GENTLEMAN—I wish to commence the improvement of a square field containing ten acres, by planting a belt of deciduous trees, say on three sides, with a view to converting it into a lawn, or park, and erecting a house in the centre, and using the ground as a pasture, ten years hence. Can you advise me what variety of seedling trees to plant, and how to arrange them? D. *Cheviot, Ohio.*

Among deciduous trees, we would recommend the Sugar and Silver Maples, the American Elm, the Northern Magnolia or Cucumber tree, the "White-wood" or Tulip tree, the European Larch, the American Cy-

*Such as the gooseberry and perhaps the mezereon, where the season of spring is scarcely known, and the transition from winter to summer is almost immediate. On southern plains, however, where cold blasts and severe frosts often succeed warm breezes, plants are more cautious in putting forth, and instances of this kind may be found in the persimmon and catalpas.

† Sunshine through a very cold sky, *when not warm enough to thaw them,* appears not injurious.

‡ The blossom buds which are most developed, and consequently the largest, are nearly all killed, while the smaller ones have no brown specks in them.

press, the Black Walnut, Chestnut, the Honey Locust, the White Ash, the Basswood, and a good portion of our best native Oaks; or any portion of the above. The exterior of the grounds, and especially in the directions from which the severer winds blow, should be freely planted with evergreens, such as Balsam and Norway Firs, Hemlock, White Pine, White Spruce, Silver Fir, American Arbor Vitæ, &c.

The planting should be done after the *natural style*, for specimens of which, see some work on landscape gardening,* or examine the finest natural groupings in nature, or representations in engraved landscapes or views of residences. Avoid the blunder which some commit, of dotting the *whole surface* over with trees irregularly disposed, forming a *monstrous irregularity;* but leave openings, internally and externally where the best views will be.

If a fruit, flower, and vegetable garden, are desired, the grounds should be laid out and planted accordingly.

An indispensable preliminary, is to make the soil deep and rich, after which good cultivation must be given the young trees in the earlier years of their growth.

Milch Cows and Calves.

A correspondent desires a few "seasonable hints on the treatment of cows at calving, and on the best method of fatting calves for the butcher." If the cow has been well wintered, and in a healthy condition, there is usually not much difficulty in calving. It is sometimes necessary to assist the cow, but as a general thing she does better left to herself. If she is long in calving and in great pain it is well to assist her by taking hold of the legs of the calf and pulling gently *when the cow strains*. If you pull too hard, and especially when the cow does not "strain" the legs will be pulled forward out of their natural position and the difficulty you seek to remove increased. The head should be advanced if possible as fast as the feet. After calving the cow should have some warm bran slops, and be carefully attended to. In England it is the universal custom to sprinkle salt on the calf in order to induce the mother to lick it dry. The first milk is usually drawn out of the bag before the calf is allowed to suck, and afterwards if the udder should become hard it is advisable to draw out as much of the milk as possible previous to letting the calf suck. The calf will then butt the udder and work at it till all the milk is drawn out clean. We have generaly found this to effect a cure. If not, rubbing and bathing with butter milk, or cold water and castile soap must be resorted to in addition.

When cows come in early, before there is any grass, and especially if they are fed on a bulky, innutritous diet, such as straw or corn stalks, they are apt to be troubled with costiveness. To prevent this there is nothing, that we have ever used, equal to mangel wurzel, and three or four pounds of oilcake meal per day made into a warm mash. Mangel wurzel are far more aperient than ruta bagas or potatoes, and oilcake much more so than corn meal or even than coarse bran. Every one who keeps a cow should have at least a few mangels or beets to feed out in the spring. The oilcake and roots will pay in increase of milk, while the enhanced health and strength of the cow is clear gain, and will tell well in the milk-pail during the coming summer. We need hardly say that it is always of the greatest importance to *milk clean*, and to treat the cow with all gentleness, avoiding harsh words, and never resorting to blows. We do not know whether cows have or have not the power to "hold their milk," but we do know that a quiet, kind and gentle woman will get more mik from a cow than a crusty old bachelor. Stephens had doubtless this fact in his eye when he said, "For my part I never see a *man* milking a cow without being impressed with the idea that he is usurping an office that does not belong to him."

In "fattening calves for the butcher," we know of no better way than to keep the cows well, and let the calves have all the milk they can take. Much depends on their being kept dry, clean and quiet. They should *be tied up*. In suckling let the strap and rope remain on them so that they can be managed easily, and as soon as they have got their fill take them away and not let them run about. Give them a little clean litter every day, and they will not be troubled with lice; if they should be, a tea, spoonful of sulphur should be given once or twice a week. It will purify the blood and rid them of the parasite, but retards the accumulation of fat, and should be given only in case of necessity. It seldom pays to keep a calf over five or six weeks, as after this age unless the cow is very well kept it seldom gets as much milk as it can assimilate, and most people object to the labor of preparing skim milk and oilcake meal for fattening calves though for *rearing calves* nothing pays better. For the London market where calves from two to three months command a high price, fattening calves with linseed tea or oilcake meal is considered quite profitable.

Fancy Pansies.

But few readers of the *Country Gentleman*, perhaps, are aware that there is such a thing as a fancy, variegated pansy. I had several varieties last summer, as follows, viz., Pale yellow, spotted on the edge with rich purple; bright yellow, edged and shaded with very deep orange-brown; yellow, upper petals edged with deep purple; deep crimson, upper petals edged with deep scarlet, lower petals edged with a narrow line of bright yellow; fine lilac, spotted and shaded with purple. These pansies were very large, many of them measuring 1¾ inches in diameter.

The seeds, from which these pansies were grown, were obtained of Messrs. Hovey & Co., Boston, the package marked "Finest large Pansies." They were sown in May, in common garden soil. When large enough to transplant, a bed was prepared by taking out the soil eighteen inches deep; a layer of coarse manure was put in to the depth of 5 or 6 inches, and the earth mixed with fine well rotted manure, filled in and the bed completed. The young plants were then set in, one foot apart each way, and the whole kept well watered, and once a week with liquid manure. The result as described above. N. Stone. *Oswego.*

Inquiries and Answers.

TILE FOR CEMENT PIPES.—I am desirous of laying pipes or logs for bringing water to the place where I reside—have been reviewing your remarks, in answer to an inquiry, in the March Cultivator of last year, where you recommend embedding *tubular tile*, such as is used for underdraining, in water-lime mortar. I confess I cannot understand how these *tile* can be used to advantage, unless made *round*, or at least not to be made a *half* round like those used for underdraining. Can tile of 1½ or 2 inch bore, be procured. Or how would it answer to dispense with the tile and make the cement pipes in pieces of 4 or 5 feet in length,—and let them harden before being laid down. But then *is* there not a difficulty in fitting the pieces together and not have them leak. A. D.

The kind of tile recommended for bedding in water-lime mortar, to form a tight channel for water, is the kind which is now prefered to any other for ordinary drains, namely perfect tubular, or in *pipes* about 15 inches long. No skill would be required to encase these in a coat of the cement on all sides an inch or two in thickness. Such tile is now made by all manufacturers, and little else is used.

Where cement pipes can be made without tile, especially if not more than an inch in diameter, they are doubtless best, and cheapest, but they require skill. Our correspondent will find some excellent practical directions on the subject on pages 175 and 221 of the last volume of the Cultivator.

SULPHATE OF COPPER TO PRESERVE WOOD.—I have seen it stated in some of the papers, that wood soaked in a solution of blue vitriol, (1 lb. of vitriol to 40 lbs. of water,) will prevent wood from decaying when in the ground. Is there anything in it. THOMAS MORSE. *Fairfield, Vermont.*

We believe this solution has generally proved beneficial. Will those who have used it give their experience.

MULTICOLE RYE.—*J. W. Patton, East Brook, Lawrence Co., Pa.*—D. P. Bigelow of Barre Center, Orleans Co., N. Y., raises considerable Multicole rye, and can probably supply your wants.

COMPOST.—I intend mixing horse and cow manure with pond muck as soon as the frost is out of the muck. How long should it remain in the heap before it is fit for use? What is the best method of making the compost? H. G. B. *Brookfield, N. Y.*

MADDER.—A correspondent desires information in regard to the best mode of propagating and cultivating madder. Will some of our experienced readers give us an article on this subject?

EDGAR HILLER. *Burnt Hills, N. Y.*—We know of no work on the cultivation of the willow to recommend you. There can be no doubt that, on low land, which is of little value for other purposes, the Osier can be raised with considerable profit. We can send you Guenon's Treatise on Milch Cows, bound, prepaid, for 75 cents.

HOP CULTURE.—It would gratify and much oblige me, and probably a great many of your readers, if some one who has for years been experimenting in order to determine the *best* way to cultivate hops, would communicate the information through your most valuable paper. A. F. RICHMOND, 2D. *Whitewater, Wis.*

FENCE POSTS.—Can you or any of your correspondents, give the best method of setting fence posts, where the rock is so near the surface of the ground as not to admit of digging the post holes more than a foot in depth. As I am desirous of constructing a picket fence around my garden, any information concerning this would be thankfully received. A. SUBSCRIBER. *Oswegatchie, N. Y.*

SALT AND ROOTS FOR MILCH COWS.—In Stephen's Farmer's Guide, it is stated that it is probably owing to the large amount of common salt in Mangel Wurzel and Turnips, that cows, fed exclusively upon them, fall off in milk, an effect likely to be aggravated by the additional use of common salt. Will your Philadelphian correspondent, who suggests the use of the latter, as a remedy for the unpleasant taste imparted to milk and butter, by turnips, have the kindness to inform us, whether he feeds exclusively on turnips, and whether he finds the quantity of milk affected by them? J. G. *Catonsville, Md., March 21st*, 1855.

OSAGE HEDGES.—*B. W.* The Osage Orange has failed as a hedge in many instances—just in the same way that a corn crop would fail, if planted in a swamp, or in the middle of the highway. The same kind of false opinion has almost universally prevailed in relation to hedging, that has proved so detrimental to successful fruit raising; namely, that the trade may be learned without any apprenticeship, and that the trees will grow without any cultivation.

The first great error generally committed, is in planting the hedge around an enclosure, near the boundary fence, where it cannot be subjected to any proper cultivation, and where it is almost totally neglected. Would a row of corn or potatoes grow and flourish in turf, among weeds, and under a fence?

The second is, in not properly and successively shortening-back. Inexperienced hedge raisers "cannot bear" to cut down nearly to the grouud, fine thrifty young plants already four or five feet high, and the consequence is, they are found to be thin and full of grass at the bottom after the hedges have grown several years, and when it is too late to remedy the difficulty without cutting the whole growth down to the surface.

A third error, not so universal, is a neglect of proper preparation of the ground. In the west, and where the soil is very rich, the young trees with good cultivation, will grow fast, but under other circumstances the ground must be made to partake of the character of good garden mould. If at all inclining to be wet, a tile drain may be put in under the proposed line of the hedge, and the upper portion filled with rich soil. Tender plants will always endure the cold of winter far better over a dry subsoil, than when subjec ed to occasional soakings. In some instances, it may be sufficient to raise by successive plowings, a broad flat ridge, (not so high but that it may be easily cultivated,) with an open ditch on each side formed by the furrow.

MUCK COMPOST.—In answer to H. G. B.'s inquiry in last No. of Co. Gentleman,—place the yard manure and pond muck in alternate layers, of as much or more muck as manure, not over two or three inches thick each, and if thinner, the subsequent intermixture will be more easy and perfect. The heap should be a paralellogram, to admit intermixture with the plow and harrow. After lying 3 or 4 months, plow down and harrow the heap to mix and pulverize it, when it will be in perfect condition to apply to wheat or other autumn crops. The substances will not be sufficiently incorporated for spring crops, but it would do for turnips by early summer.

TEA WHEAT.—Several correspondents inquire where Tea wheat can be obtained. Those who have it would do well to advertise, stating price, &c.

TURNIPS FOR COWS.—J. G., Catonsville, Md., asks me in this week's number of your paper, "whether he feeds exclusively on turnips." My cows are fed as much cut hay, of the best quality, morning and evening, in their stalls, as they will eat, and a fair allow-

ance of second crop, or inferior quality of first crop hay, not cut, in their sheds at noon.

"And whether he finds the quantity of milk affected by them." In answering yes, advantageously I think, I may say that I am not able to answer from measurement. But where I am sure of not being mistaken, is as to the condition of the animals at this season, or a month earlier than this, that have been fed with roots since Christmas, compared with animals kept on dry food. And as J. G. knows, probably better than I do, the condition of a cow *now* has a good deal to do with her usefulness for eight months to come.

Another matter in feeding with baga, not so with the common turnip, is in the color it gives to butter—removing that very white look which winter butter is apt to have.

Having occasion to be absent from home with my family, from September to June, a few years since, I made before starting, an arrangement with a neighbor farmer, who has excellent butter, that he should carry my butter to market with his, and receive a commission on the sales. On settling accounts, he told me he would have thrown up the bargain if I had not been so far off that it would not have been right to do so, because he found my butter interfered with the sale of his--it was so much yellower. That season I had grown only ruta baga. I. *Philadelphia, April 7*, 1855.

H. H., *Rockville, Ind.*—For reply to your inquiry in relation to Ketchum's combined mower and reaper, see reply to G. Lauderback, Co. Gent. for March 29, p. 199.

Schuyler Gage.—*A. M. L., Huntington, Ind.*—Such has been the call for scions of this plum, that Mr. Dorr has been unable for some time past to furnish them.

Growing Seeds.—J. C., of Niagara county, asks our opinion as to "whether the business of raising garden and field seeds for sale, is profitable." It is undoubtedly, where judiciously managed, profitable, as it costs but little more to grow good than poor seeds, while the former secure much higher prices. There is always a ready market for all choice field seeds; but for garden seeds, the market is uncertain, and arrangements should be made for their disposal before a farmer enters largely into their culture.

"Canada Club Wheat."—There probably has been more of the "Canada Club" wheat raised in Wisconsin the last two years, than of any or all other varieties put together. I think it the best variety of spring wheat that has yet been introduced here. It yields well, is heavy, and produces a good quantity and quality of flour. The "Tea Wheat" I have heard spoken of, but have not yet met the farmer who has raised it. A Wisconsin Subscriber.

Carrot Seed.—Information is requested through the Country Gentleman, concerning the best method of cleaning carrot seed. J. L.

Prince's Willow.—Can any of your readers inform me where to procure the "Prince's Willow?" a variety imported some years ago by Dr. Grant. If I knew where he lives, I would address him on the subject. [Dr. G.'s address is Newburgh, N. Y.]

Japan Pea.—Having asked a question, I take the liberty of answering one propounded by J. W., in No. 12, on the subject of the Japan Pea, or rather Bean. I have cultivated it for the last three years, and have disseminated it from Canada toTexas. It produces abundantly in common corn ground, planted six inches apart in the row, and the rows from eighteen inches to two feet apart—wide enough to hoe or to use a small cultivator. When eaten a few times they are pleasant enough, but have very little flavor--better when mixed with other beans. Before cooking, they must be soakt ed at least twenty-four hours. They are inconvenien to use green, being so difficult to hull. Chickens are very fond of them, and hogs devour them with great gusto. I think they would do for a field crop sown broadcast in good soil. T. V. P. *Mount Carmel, Ohio.*

Corn Planter.—Will you, or some of the readers of the Country Gentleman, inform an inquirer where he can get "*Bullock's Patent Seed Planter?*" for what price it may be had, and does it succeed well as a corn planter? A. Tubbs. *Tyre, March* 20, 1855.

Bee Moth.—Will some experienced person inform me through the Cultivator, what will destroy the Bee Moth or worms; and what kind of boxes are best suited to prevent their depredations. B. N. Warner. *Washingtonville, March* 19, 1855.

Extracts from Correspondence.

The Winter in Illinois.—We make the following extract from a private letter of Dr. J. A. Kennicott, Cor. Sec'y of the Illinois State Ag. Society, dated West Northfield, March 21:—"We have had four snow storms here, in 8 days—and yesterday the mercury was down to 5° above zero, at sunrise. Last night, I judge it must have gone down to near 0—it was only 4° above, *after* sunrise! Most of the flower buds of the Peach were killed, long ago, and the *trees* have suffered too. This bright sun, after *such* nights, will be hard on them. Still, we have not had such *extreme* cold, as you in New-York—10° below 0, was our *lowest* mark, in Febuary—8° below in January. But the Peach buds were a little started, in early winter; and great damage has been done our *nursery trees*, by the weight of drifted snow."

Egyptian Rye.—We have been raising a spring grain entirely new to this vicinity, called Egyptian rye. Its growth somewhat resembles barley, being bearded, and having short hollow straw; it separates from the chaff similar to wheat, is very productive, suited to light soils, and subject to no insect depredations. The berry is a little longer and narrower than wheat, and about the color of the variety called Soule wheat. We have used it for pastry and pancakes, and by the addition of more leaven than is used for wheat flour, it makes a very excellent and white appearing bread. It weighs from 58 to 60 lbs. to the bushel. A sample of this grain can be seen at R. H. Pease's Agricultural Warehouse. James Arkell. *Canajoharie.*

Lime to Kill Sorrel.—A correspondent says:—"Should sorrel make its appearance to any extent in my fields I should regard it as an evidence that another dressing of lime would be advantageous. Whether sorrel really does denote an *acid soil*, I am not prepared to say, but I do know that on land that had, at regular and stated periods, received an abundant supply of barn-yard manure, sorrel made its appearance, and overpowered the grass. Since then, lime having been freely used, the sorrel has disappeared, and the land is very productive of grass. The practice of liming, it is true, may be carried to excess, but with many it is rather a sin of omission than of commission."

Washington Territory.—We have a letter from a subscriber, dated "Olympia, Puget's Sound, Wash. Ter., Feb. 16th," from which we learn that the winter on the North-west coast has been as remarkable for its mildness as ours has been for its severity. The farmers in this new territory seem to be as wide awake as their more southerly neighbors. They have procured an act of incorporation, and are about to organize a Territorial Ag. Society

Notes for the Month.

Award of Premiums to Agents.

According to our books the Premiums we offered to Agents for the largest amount of subscriptions for the present year, are due to the following gentlemen:

1.	Hiram Mills, Lewis county, for	$209.62	$50
2.	G. W. Durant, Albany county,	86.13	45
3.	L. W. Curtis, Madison Co.,	69.00	40
4.	Geo. W. Coffin, Dutchess Co.,	62.75	35
5.	E. M. Guffin, Iowa,	56.00	30
6.	J. R. Howard, Massachusetts	52.75	25
7.	George Hamilton, Nova Scotia,	52.00	20
8.	E. Benedict, Clinton Co.,	47.94	15
9.	S. H. Williams, Oneida Co.,	44.50	10
10.	A. Carey, Montgomery Co.,	43.00	5

The above prizes will be paid in cash on demand.

☞ In tendering our thanks to our agents and friends, for their earnest efforts in behalf of THE CULTIVATOR, we would remind them that additions may be made to clubs at any time during the year. As THE CULTIVATOR and ANNUAL REGISTER are stereotyped, we shall be prepared to supply orders for them at all times.

NEW-YORK STATE FAIR.—The citizens of ELMIRA having complied with the requirements of the Executive Committee, it has been decided that the next Fair of the New-York State Ag. Society, shall be held in that town, on the first week of October. The regular meeting of the Executive Committee for May, is to be held at Elmira, on the first Thursday of the month.

THOMAS' "FARM IMPLEMENTS."—We are gratified to learn from the publishers of this valuable work, that its sales already sum up *over four thousand copies*—a very large number, when we consider that it is not quite ten months since it was first issued. It may not be out of place to remind our readers of the fact mentioned some time since, of its having been republished, cuts and all, in England—the first instance of the kind, probably, in agricultural literature. These two circumstances together, afford high testimony of the public appreciation of its value.

We are happy to learn of the recent election of Dr. ASA FITCH, of Washington County, as member of the Entomological Society of France. It is the first instance we understand, in which this honor has been conferred upon an American by this, the most eminent association of the day, devoted to this particular branch of science. It is an honor well deserved. The Doctor has long been patiently and industriously engaged in his favorite study, though as his modesty is only equalled by his merit, without bringing himself any more than has been absolutely necessary, into the notice of the public. He has been employed during the past year, under an appropriation for the purpose, from the Legislature to the State Ag. Society, in investigating the character and habits of the insects of New York injurious to Agriculture, and we are glad to know that this appropriation was continued for another year at its late session. Too high an estimate can scarcely be placed upon the importance of the subject, as is evident when we consider the vast sum to which their yearly depredations must amount. Dr. FITCH'S excellent lecture at last winter's meeting of the State Ag. Society, to which we alluded briefly at the time, was a clear demonstration of this fact; and we should have been surprised had not his able vindication of its importance been remembered in the appropriations for the year.

DELEGATE TO PARIS.—At the last meeting of the Executive Committee, HENRY WAGER, Esq., of Rome, was appointed a delegate to represent the New-York State Ag. Society, at the French Exhibition of the Industry of all nations, which is to be opened in Paris, next month. Mr. W. had previously received a similar appointment from the United States Ag. Society.

CONN. STATE FAIR.—The second annual Fair of the Connecticut State Ag. Society, is to be held at Hartford, commencing on the 9th of October. The Prize List is a very liberal one—considerably larger, we think, in proportion to the size and population of the State, than that of any other in the Union. It includes handsome premiums for cattle, horses and sheep, from other states.

☞ Col. E. C. FROST, of Catherine, Chemung Co., has been appointed a member of the Executive Committee of the N. Y. State Ag. Society, in place of T. F. FAXTON, Esq., of Utica, resigned.

CANADA THISTLES CHANGING TO CHESS.—A correspondent in a late number of the Michigan Farmer, gives a statement of the successful destruction of a patch of Canada thistles, by repeated plowing through summer—a mode that has often before proved successful. But the whole field being sown with wheat, the exact portion on which the thistles were killed, was covered with nothing but chess. He thinks the wheat changed to chess, but we are rather inclined to think the injured thistle roots must have been the progenitors, on the principle that a bad weed will be more likely to produce another bad one. Should we expect to gather grapes of thorns, figs of thistles, or inversely, chess from good grain? We at least commend this suggestion to our Michigan friend.

STATE FAIRS.—We hear that VERMONT is to hold her next State Fair at *Rutland*, commencing on the 11th of Sept., and ILLINOIS at *Chicago*, the first week in October.

The next State Fair of Indiana is to be held at Indianapolis, provided $2,000 are raised by the city and county, and provided further that the Board can make reasonable terms with the Railroads.

LEATHER SCRAPINGS AS MANURE.—You will do me a favor to inform me whether the *scrapings* of leather from a currier's shop are of any value for manure? If so, how can they be used for that purpose? I can get hundreds of loads of them, and if of any value, it will be quite a prize. A. S. MOSS. *Fredonia.*

Dry leather scrapings contain as much nitrogen as the best Peruvian guano, and, could they be decomposed and rendered readily assimilable without loss, would be nearly as valuable. As it is, like woolen rags, horn shavings, hair, fish, &c., they are among the most valuable natural fertilizers known. The largest crop of potatoes we ever saw—600 bushels per acre—was grown with a compost of old leather scraps fermented for two years with barn-yard manure. The best method of using leather scrapings, is to form them into a compost with soil enough to prevent the escape of ammonia. Or they may be applied directly to the soil in their fresh state. Three or four tons to the acre in their natural state, would be a heavy dressing. After being decomposed in a compost heap, a less quantity must be used; half a ton to a ton per acre of the leather in this state, would be sufficient.

SWEET POTATOES.—D. E. S., *New-York.*—In the Southern states the Sweet Potato flourishes in great perfection—and even in New Jersey and Long Island, by the aid of a hot bed, good crops of excellent quality may be obtained. In Western New-York, they sometimes do well on very light, warm soils, but as a general thing their quality is rather inferior. One cause of this is—and happily it is one which may be easily avoided—the land is made too rich with putrescent

manures. Scientific investigations have shown that rich nitrogenous manures *lessen the proportion of sugar* in the sugar beet; and it is probable that the sweet potato is similarly affected. We would recommend the trial of good superphosphate of lime applied in the hill, as likely to improve the quality of the sweet potato.

The first step in the culture of sweet potatoes is to get the sprouts. Our correspondent can obtain them, probably, from the seed stores in New-York. They are raised by planting whole potatoes about six inches apart in a hot bed, in April. In about a month when the first sprouts are three or four inches high, they are separated from the parent tuber and planted out in hills, leaving other shoots to follow for successive plantings. They are planted in hills about 4 feet apart, and must have clean culture. Will some of our correspondents give us the results of their experience briefly.

LEICESTER SHEEP.—*B. S., Logansport, Ind.*—HUNGERFORD & BRODIE, Rural Hill, Jeff. Co, N. Y., J. A. & D. N. RATHBUN, Springfield, Otsego Co., N. Y., are among the best breeders of Leicester sheep in this state. In Canada West, Wm MILLER, of Pickering, has as good Leicesters as any we have seen in this country. GEO. MILLER, Markham, JAMES DIXON, Clarke, COWAN & SHAW, Waterloo and many others in Canada-West, are also celebrated breeders of Leicester sheep. Any of these gentlemen will be able to answer your inquiries in regard to price, &c.

WIRE WORMS.—I perceive there appears to be some difficulty among your correspondents with those pests of farmers—wire worms. I will give you a plan which my father has adopted, and which, if it does not destroy them, effectually prevents their depredations on the corn crop at least. I have never seen it tried on any other crop. Make a strong solution of copperas, with cold water, into which put your seed corn, and let it soak twenty-four hours before planting. The corn may be dried by rolling in gypsum. Corn prepared in this way will vegetate one day sooner than that which is unprepared. Do you know of a remedy against the "Grub?" I have found none but to catch and kill them by hand. DISCIPULUS. *Amsterdam, N. Y.*

WHEAT CROP OF SCOTLAND.—It appears from statistical returns just made to Parliament, that the wheat crop the last year in Scotland, in "the best districts," averaged from 28 to 36 bushels per acre, while in the "worst districts," the average was in no case less than 21½ bushels, and from that up to 28. We should like to know how the best wheat districts of this state would compare with the above, and shall be obliged to any of our friends who will furnish an estimate for their vicinities.

MELON APPLE.—At the meeting of the British Pomological Society, on the 5th of March, Mr. RIVERS of Sawbridgeworth, presented samples of this apple, grown in his nursery. "This," says the report, "was considered a very valuable acquisition, as being one of those delicate fleshed and much esteemed varieties which so rarely come to perfection in this country. It possessed that peculiar tender flesh and flavor which is only met with in imported specimens of Newtown Pippin." The Melon apple, it will be remembered, originated in Western New-York.

ASHES FOR SORREL.—Leached or unleached ashes will clear the ground of this worthless trash. About twenty years since my father put leached ashes, at the rate of ten loads per acre, on a piece of land so poor that nothing but sorrel would grow upon it, and sowed it to wheat. The crop was good, and from that time to the present, whether in clover, wheat, corn or grass, there has been a marked superiority over the adjoining land where no ashes were applied, so much so as to be easily discernible by the most casual observer. The experiment was tried on another field, with equally satisfactory results. H. B.

Agricultural and Horticultural

IMPLEMENTS.

MOWING AND REAPING MACHINES, Plows, Harrows, Cultivators, and all other Field and Garden Implements of the most improved kinds The largest and most complete assortment to be found in the United States.

R. L. ALLEN, 189 & 191 Water-st.,
March 22—12,14,16,18—m2t New-York.

DISSOLUTION.

THE co-partnership heretofore existing between the subscribers, under the name and firm of H. BLANCHARD Co., is this day dissolved by mutual consent. Either party will sign in liquidation. HOMER BLANCHARD.
T. M. BURT.

Kinderhook, March 31, 1855.

NOTE.—All communications relating to the business of the old firm of H. BLANCHARD & Co., should be directed to Kinderhook, N. Y.

CO-PARTNERSHIP.

The subscribers have formed a co-partnership under the name and firm of H BLANCHARD & CO. for the transaction of a Commission Wool business in the city of Hartford, Conn

HOMER BLANCHARD, Kinderhook.
LAWSON C. IVES, Hartford.

Hartford, March 31, 1855.

CIRCULAR.

It is now ten years since the subscriber started the WOOL DEPOT system, it being the first attempt at a close classification of Wool in the fleece in this country; four years alone, and six years in company with Mr. T. M. BURT, who now retires from the business. His experience but confirms the position which was taken by the friends of this enterprise in its infancy; that there is no other system yet devised, which is so appropriate to meet the wants and necessities of the wool-grower, dealer or manufacturer, as the close classification of Wool in the fleece. The manufacturer can obtain the grade he wants, and the seller of Wool the relative value of each grade, quality and condition considered; thus affording facilities and encouragement for improvement.

The present location is not deemed by himself, and many of the friends and patrons of the Depot system, as favorable for effecting ready and quick sales as a more central one, easy of access, and in the immediate vicinity of manufacturing establishments. He has therefore formed a copartnership, as above stated, and will remove the Kinderhook Wool Depot business to the city of Hartford, Conn. There is annually manufactured within four hours' ride of that city, more than twelve millions pounds Wool; and within six hours' ride, more than one-half of all the wool worked by manufacturers in the United States.

The same system of classification will be continued as practiced at Kinderhook. Also the services of the same sorter retained. The same charges for receiving, sorting, storing and selling, viz: one and a half cents per pound and the insurance, when sales are made for cash as heretofore. In order to possess additional facilities for selling, sales will be made on time, when they can be more readily effected or better prices obtained, than for cash In all such cases where time sales are made, the payment will be guaranteed, and the usual guarantee commission of two and a half per cent. on the amount of sales, will be charged additional.

Advances will be made in cash or by acceptances, as may be agreed upon. Sacks furnished to consigners by charging 25 cents each for their use.

Thankful for the liberal patronage and confidence bestowed, the subscriber respectfully solicits a continuation of past favors, and confidently hopes, and firmly believes, that he can better promote the interests of his consignors by a change of location, than by remaining where he has formerly been.

H. BLANCHARD.

NOTE.—After six years' experience in selling Wool at Kinderhook, I fully concur in the propriety of H. BLANCHARD's decision to change his location, and remove the Kinderhook Wool Depot business to the city of Hartford, believing that the interests of our former consignors will be promoted, by making more ready sales, and avoiding the delays consequent upon our location, and to a rigid adherence to the cash system. T. M. BURT.

REFERENCES.

George Beach, Esq., President Phœnix Bank; H. A. Perkins, Esq., President Hartford Bank; Messrs. Day, Ower & Co., Merchants; Messrs. Day, Griswold & Co., Merchants; Messrs. Collins & Brothers, Merchants, Hartford, Conn. Messrs. Hacker, Lea & Co., Merchants, Philadelphia; Messrs. Freeland, Stuart & Co., Merchants, New-York; Dr. J. P. Beekman, President Bank Kinderhook, Kinderhook, N. Y. May 1—m3t

Cure for the Croup.

One of your correspondents recommends Hydropathy for croup. It is unfailing. PRIESSNITZ, the father of the Water-cure, told me in 1850, that he had never lost a case—that he had been called in often when the child was nearly suffocated, and had seen the same child playing in the street the next morning. His plan was simple. Several folds of wet linen were applied to the breast, while the body was enveloped in a wet sheet—(linen being a better conductor of heat than cotton, is preferable)—a couple of blankets were packed tightly over the sheet. In ten minutes a free perspiration was the consequence. In slight cases, this was sufficient. In more aggravated ones, the operation was repeated with a fresh sheet; the blankets were then packed tightly as before, an opening being left at the feet, for the introduction of a clyster of cold water. This was for the purpose of preventing the further formation of the false membrane, which produces the suffocation. A lively perspiration ensued in the course of fifteen minutes, when the patient was removed from the packing, and a wet sheet thrown closely around him, a gentle rubbing on the outside of this, with the hand, removed the perspiration, and all remaining unnatural heat, produced by the croup, arousing instead a healthy circulation and excitement over the whole body. Sleep, which was before impossible, now came unsought for, and the next morning saw no trace of the disease, and little liability of its recurrence. J. G. *Catonsville, Md.*

Heading of Cabbage and Cauliflower.

We notice in the Co. Gent., page 121, an allusion to a common practice among practical gardeners, and especially among the market gardeners of London, (a pretty sure index as to the efficacy of any particular routine in kitchen garden operations,) of the *probable* beneficial effects of transplanting cabbage or cauliflower, and we might add any of the tribe, at two different times. The method is this, and we would advise each and every one who can possibly spare the time, to practice it. In the case of field culture, where the quantity of cabbage for instance is reckoned by the acre, it is scarcely possible to spare the time necessary to perform it: but for the garden, it is every way preferable. Whether the seed is sown in a gentle hotbed, or in the open border later in the season, is of no consequence; as soon as the young plants put forth their rough leaf, or are large enough to handle, they are carefully taken up, and "pricked out" into other borders at two to four inches apart each way. They are carefully watered if dry weather, and shaded from the sun if late in the season, and stand in this place till they become good stocky plants. They are then carefully lifted, and the tap-root having been severed in the act of raising them from the seed bed, they will have thrown out a large quantity of fibres, and hence have a ball of roots so to speak, to take hold of the soil at once.

The beneficial effect of the operation may be explained thus. The cabbage tribe for culinary use, as every botanist knows, is a species of Morphology, or monstrous development of certain parts of its structure, and dependant upon a high state of culture to exhibit its greatest degree of monstrous or cabbage headed form. Lessen this, and you at once bring it back into a nearer approximation to its original type, which consists in its springing up, perfecting its seed, and dying away. The transplanting them destroys its tap root, encourages a quantity of fibres to take its place, and hence increases its capability to develop its monstrous, and to the wants of man, its best shape. E. SANDERS.

Household Matters.

[A lady of our particular acquaintance, remarkable for her skill in household matters, has sent us the following receipts, (with the introductory remarks,) and has promised more—which we are sure will be acceptable to our readers.]

While so much is said for the improvement of the Country Gentleman, I should be glad to see something mingled with it for the improvement of the Country Lady—that she may be instructed to cultivate and adorn her own Eden (which I take to be her family circle) and from which I trust she may never again be tempted. While her hands are employed in making good butter and cheese, may we not occasionally have an article that shall serve to strengthen her in the performance of all her duties as a true woman.

TOMATO PIE.—Take fully ripe tomatoes, throw them into boiling water for a minute or two, to remove the skin; have ready a paste, such as one would make for a peach pie—cut the tomatoes, and place a layer, of sugar and a layer of tomatoes, and some peach kernels, which gives them a peculiar peach flavor. Pies made in this way can be scarcely distinguished from peach, and are really delicious. They must have about as many kernels in a pie as are found in a real peach pie. [As the peach crop has been destroyed this year in a large portion of the country, and many peach stones were saved over, this may prove a valuable substitute the present season. EDS.]

PERUVIAN GUANO.

THE above is received *direct* from the Peruvian Government, and is warranted FRESH and PURE, of the FIRST quality—and not DAMPENED to make it WEIGH HEAVIER. The GOVERNMENT BRAND is on every bag. For sale in large or small quantities, at the lowest price.

Superphosphate of Lime, Poudrette, Plaster of Paris, and all other valuable Fertilizers. R. L. ALLEN,

189 & 191 Warer-Street,

March 22—12.14.16.18—m2t. New-York.

NOTICE.

PERUVIAN GUANO. As there are various substances now offering for Peruvian Guano, in the New-York market, to avoid imposition, be particular to observe that every bag of the genuine Peruvian Guano has branded upon it,

WARRANTED NO. 1.

PERUVIAN GUANO,

Imported into the United States by

F. BARREDA BROTHERS,

FOR THE PERUVIAN GOVERNMENT.

When taken in quantities from 1 to 5 Tons,.....$48
do do do 5 to 10 do 47
do do do 10 to 15 do 46

A further discount in larger quantity. 2000 lbs. to the ton.

A. LONGETT, 34 Cliff-st.,

March 22—w1tm2t Corner of Fulton, New-York.

Blood Stock for Sale.

THE subscriber offers for sale the following Devonshire Stock—viz: 2 fine Cows, with calf by Imported Bull RUBENS, which took the 1st Premium at the N. Y. State Fair in the year 18—; one very fine yearling Bull, sired by the same imported Bull; 2 yearling Heifers, one of which sired by the same; 2 two-year-old Heifers, and one 3 year old Bull. The above originated from the stock of S. & L. Hurlbut, of Winchester, Ct., and warranted *pure*. Satisfactory references with their pedigree can be given.

Some other stock of the Natives also

N. B. POTATOES for sale, for eating and seed—Mercers, Carters and Silver Lakes.

FRANCIS W. COWLES,
March 29, 1855—w6tmlt Farmington, Ct.

Maclura or Osage Orange Hedges.

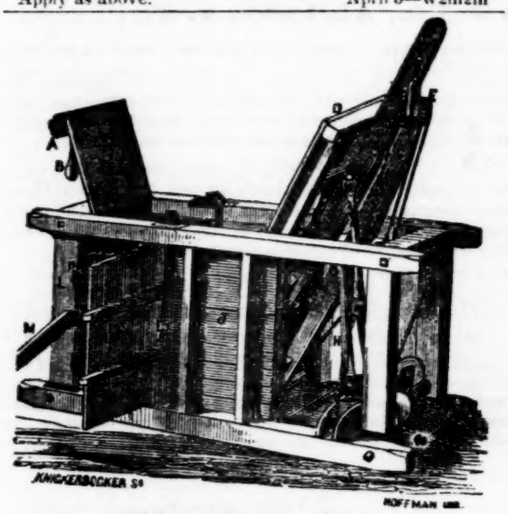
H. W. PITKIN,

Manchester, Conn., Dealer in Seeds and Plants.

IN consequence of the increasing demand for this remarkable Hedge plant, my exclusive attention is now given to the business. Seed is yearly gathered by my own agents, and may be relied upon as fresh and genuine. As many persons prefer the plants ready for setting in hedges, I have established nurseries in different sections of the country, where they are raised on an extensive scale, and in the most economical manner, and am ready to contract them in any quantity. A descriptive pamphlet on the Culture of Osage Orange Hedges, given to purchasers.

G. G. SHEPPARD, New-York—P. B. MINGLE, Philadelphia—BYRAM, PITKIN & Co., Louisville, Ky., wholesale Agents.

Apply as above. April 5—w2m2m



Dederick's Hay Press.

Dederick's Parallel Lever Horizontal and Vertical Portable Hay Press. Patented May 16th and June 6th, 1854.

THE above new, powerful, and exceedingly convenient Press, with two men and a horse, will bale, according to the No. of the press, from six to eight tons of hay per day. The Press for 300 lb. bale, is 12 feet long, 5 feet high and 3½ wide. It can be drawn by a pair of horses or oxen, as a sleigh is drawn, from one field or farm to another; and whenever stopped, is always ready for operation. They are now being shipped to all parts of the country, and are, in every case, giving the highest satisfaction. They have received the 1st Premiums at the New-York, Ohio and Pennsylvania State Fairs. Prices, according to the size, from $130 to $175.

For further particulars, address

DEERING & DICKSON, Manufacturers,
Premium Agricultural Works, Albany, N. Y.,

Or either of the following Agents:

John Mayher & Co., P. B. Gates, New-York.
Paschall Morris & Co., Philadelphia, Pa.
James Wardrop, Pittsburg, Pa.
James Garget & Co., Cleveland, Ohio.
Byram, Pitkin & Co., Louisville, Ky.
Wm. M. Plant & Co., St. Louis, Mo.
Mumford & Co., Lafayette, Ind.
A. & J. Kenworthy, Thornton, Ind.
J. W. Holder & Co., Bloomington, Ill.

March 15—w&mtf

COPARTNERSHIP.

C. M. SAXTON, No. 152 Fulton Street, has this day associated with himself, as copartner in the PUBLISHING BUSINESS, AUGUSTUS O. MOORE.

The business will hereafter be conducted under the firm of C. M. SAXTON & CO.

New-York, February 21st, 1855.

NEW BOOKS.

C. M. SAXTON & CO.,

AGRICULTURAL BOOK PUBLISHERS,

No. 152 FULTON STREET, NEW-YORK, have in press:

I.

THE PRACTICAL LAND DRAINER;

Being a Treatise on Draining Land, in which the most approved systems of Drainage are explained, and their differences and comparative merits discussed; with full Directions for the Cutting and Making of Drainage, with Remarks upon the various Materials of which they may be composed. With many illustrations. By B. Munn, Landscape Gardener. Price 50 cents.

II.

The Practical Fruit, Flower, and Kitchen Gardener's Calendar.

By Patrick Neill. Edited by G. Emerson, M. D., Editor of "Johnson's Farmer's Encyclopedia." With Notes and Additions, by R. G. Pardee, Author of "Manual of the Strawberry Culture." With illustrations. Price, $1.25.

III.

DOWNING'S LANDSCAPE GARDENING.

C. M. SAXTON & Co., No. 152 Fulton street, have in press a new and elegant edition of a treatise on the Theory and Practice of

LANDSCAPE GARDENING,

Adapted to North America, with a view to the Improvement of Country Residences, comprising Historical Notices and General Principles of the Art, Directions for Laying Out Grounds and Arranging Plantations, the Description and Cultivation of Hardy Trees, Decorative Accompaniments to the House and Grounds, the Formation of Pieces of Artificial Water, Flower Gardens, etc., with Remarks on Rural Architecture, by A. J. DOWNING. Price, $3 50.

JUST PUBLISHED,

Youatt and Martin on the Hog,

A Treatise on the Breeds, Management, and Medical Treatment of Swine, with directions for Salting Pork, and Curing Bacon and Hams. By William Youatt, V. S. Illustrated with engravings drawn from life. Edited by Ambrose Stevens. Price, 75 cts.

Pardee on Strawberry Culture.

A Complete Manual for the Cultivation of the Strawberry; with a description of the best varieties.

Also, Notices of the Raspberry, Blackberry, Currant, Gooseberry and Grape; with directions for their cultivation, and the selection of the best varieties. "Every process here recommended has been proved, the plans of others tried, and the result is here given." With a valuable Appendix, containing the observations and experience of some of the most successful cultivators of these fruits in our country. Price, 50 cents.

Elliott's American Fruit Grower's Guide in Orchard and Garden;

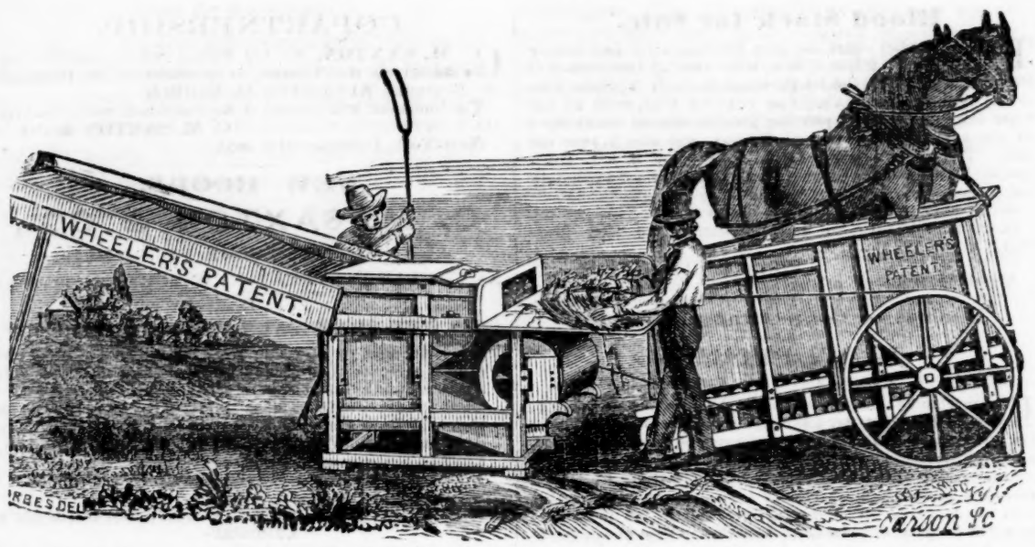
Being a Compend of the History, Modes of Propagation, Culture, &c., of Fruit Trees and Shrubs, with descriptions of nearly all the varieties of Fruits cultivated in this country; and Notes of their adaptation to localities, soils, and a complete list of Fruits worthy of cultivation. By F. R. Elliott, Pomologist. Price, $1.25.

The above books will be sent, Postage paid, to any part of the Union. April 5—w3tm2t

Black Hawk Horse Raven.

THIS Horse will stand at the farm of the subscriber in Norfolk, Conn., called the Robbins Farm, the coming season, at ten and fifteen dollars. The oldest colts of this horse are three years old. The stock is of extraordinary promise. Raven is by Vermont Black Hawk—dam has the blood of Gifford Morgan and of Cock of the Walk.

April 19—w3tm2t ROBBINS BATTELL.



NEW-YORK STATE AGRICULTURAL WORKS,

BY WHEELER, MELICK & CO., ALBANY, N. Y.

ENCOURAGED by the preference which has been given to our Machines wherever they have been introduced, we ake pleasure in announcing to the Farmers and Planters of he United States, and to Dealers in Agricultural Machines generally, that our arrangements for the year 1855, are on a scale sufficiently extensive to enable us to fill our increasing orders, with promptness and despatch. We shall continue to adopt every alteration that experience suggests, and thorough test proves to be valuable. Our manufacturing facilities, including steam labor-saving machinery and tools, are unequalled in extent and completeness, by any similar establishment in the world; and each branch—Iron, Wood, Foundry Work, and Finishing, is under the immediate superintendence of a competent and experienced partner, who personally inspects materials and workmanship. We employ competent workmen, and have no job or piecework done. In our long experience: our determination to make each article the best of its kind; in our superior manufacturing facilities; in the regularly increasing popularity of our Machines wherever they are used, and in our unrestricted warranty, we trust the public will continue to find the strongest guaranty that can be given, that our machines are unequalled in the quality of their work, durability, convenience, and cheapness.

☞ A MEDAL was awarded to WHEELER'S POWER AND THRESHER at the recent Crystal Palace Exhibition in the City of New-York.

WHEELER'S
Patent Endless-Chain Railway Horse Power.

These Horse Powers, (represented in the above cut,) are unrivalled for driving all kinds of Farmers', Planters', and other Machinery, which admits of being driven by Horse Power. They are made for either one or two horses, and their superior merits, in point of durability and ease of running, are fully established; while their compactness and simplicity, lightness, and greater length and width of Treading Floor and Stall, give them advantages over other Powers, which are highly appreciated by those who have tried them. *Several thousands* are in use, some of which have threshed over 100,000 bushels, and though our present Powers are much improved over the old ones of the same kind, yet the latter are still good. Over 1000 of them were sold by us and our agents the past season, (a larger number than in any previous year,) thus proving their increasing popularity.

WHEELER'S
Patent Combined Thresher and Winnower.

This Machine, (also represented in the cut,) is a late invention. It was got out three years ago, after a long series of experiments resulting in a machine which performs the *three operations of Threshing, Separating, and Winnowing*, with as much dispatch, and as few hands and horses as are required to thresh and separate only with other machines, and although designed for so complicated work, it is yet a model of simplicity and compactness. The entire running parts are driven by the main belt and one small band. We have no doubt it is the most perfect machine in use for Threshing and Winnowing. Driven by two horses, they thresh and clean from 150 to 200 bushels of wheat, or twice that quantity of oats per day.

We give a notice of it from the Valley Farmer, published at St. Louis, Mo., and also two letters from gentlemen, who have the machines in use, showing the estimation in which they are held; premising that these two are about an average of many other similar letters, which we can show

[*From the Valley Farmer of August*, 1853.]

"Wheeler's Combined Thresher and Winnower."

"We take pleasure in laying before our readers the following extract from a letter just received by us from a very respectable individual in Cape Girardeau County, Mo., to whom we sold one of these machines about a week ago, with the understanding that if it did not work to his satisfaction he could return it to St. Louis at our expense. It will be recollected that the manufacturers warrant these machines to thresh and clean from 150 to 200 bushels of wheat per day, or twice that quantity of oats."

"APPLE CREEK, Mo., July 18, 1853

"MR. E. ABBOTT,

"Dear Sir: I have tried my Thresher and Winnower, and it has given entire satisfaction. I have moved the machine one mile, set it up, and threshed two hundred and forty-two bushels of wheat *in one day*, and have threshed forty bushels an hour. It works finely, and is considered the best machine to thresh and save grain in South-East Missouri.

"IT CAN'T GO BACK TO ST. LOUIS.

"I think I shall thresh from 8,000 to 10,000 bushels of wheat this season. Yours truly,

JAMES F. COLYER."

Another gentleman to whom we sold our Double Power and Combined Thresher and Winnower, writing to us from Orange Co., N. Y., under date of Dec. 9th, 1853, says:

"I have received the Machine, and used it, and it gives the very best of satisfaction that could be expected.

Yours truly,

HENRY J. HOWE."

Having sold between 300 and 400 of the Winnowers during the past season, we could, if space permitted, give many other testimonials to their utility, but the above must suffice.

WHEELER'S
Overshot Thresher with Vibrating Separator.

This Machine is also our own invention, and has been in use 13 or 14 years, and its many advantages are appreciated

by *other Manufacturers*, as well as the farming public. Driven by our double Power, it threshes and separates from the straw from 150 to 200 bushels of Wheat, or twice as much Oats, per day. For the Single or One Horse Power we make a smaller Thresher and Separator, which threshes from 75 to 100 bushels of Wheat per day. The small Machine is adapted to moderate sized farms, and as the Single Power is sufficient for sawing wood, churning, cutting stalks, straw, &c., and driving almost every kind of Machine used by Farmers, and is capable, by changing Horses and elevating the Power properly, of threshing much faster than we stated above, it is a very popular Machine in some sections.

We would also call especial attention to our Clover Hullers, Portable Saw Mills, and Stalk and Straw Cutters, either of which are adapted to both our Double and Single Powers.

☞ All our Machines are *Warranted* to give entire satisfaction, or they may be returned at the expiration of a reasonable time for trial.

PRICES.

For Double or Two Horse Power, Thresher and Separator, including belts, wrenches, and oil-cans, complete,	$160 00
Double Power alone, including belt,	120 00
Do without belt,	115 00
Double Thresher and Separator, alone,	40 00
Single or One Horse Power, Thresher and Separator, including belts, oil-cans and wrenches, complete,	128 00
Single Power alone, including belt,	90 09
Do without belt,	85 00
Single Thresher and Separator, alone,	38 00
Clover Hullers,	32 00
Straw and Stalk Cutters, for Horse Power,	32 00
Circular Saw Mill, with 24 inch Saw,	38 00
One Horse Power, without band wheel,	80 00
Churn Gearing,	13 00
Band Wheel,	5 00
Band for Power,	5 00
Double Power, with Combined Thresher and Winnower, including belts, wrenches, &c.,	245 90
Combined Thresher and Winnower, alone,	125 00

Orders are solicited, and will be promptly filled.
Address

WHEELER, MELICK & CO.,
Albany, N. Y.

Albany, April 19, 1855—w&m1t

Ditch Diggers, Tile and Brick Machines,

Manufactured by PRATT & BROS., Canandaigua, N. Y

THE Ditch Digger and Tile Machine were constructed to cheapen and extend Drainage. Ditches must be made cheaper and faster, and Tile must be made easily, simply and extensively. The Farmer feels it and agriculture demands it: and we beg leave to say to all interested, that these machines will accomplish the object.

We warrant our Ditch Digger to be capable of cutting from fifty to 150 rods of Ditch in a day, by the use of one man and two horses, not less than 2½ feet deep; and that this implement is made in a thorough and workmanlike manner.

We warrant our Tile Machine to be capable of making from tempered clay, 10 to 15,000 Tile or Brick in a day, by the use of two horses—grinding the mud and making the Tile or Brick at the same time and by the same operation—using steam or water power with equal facility.

This Tile Machine enables Brick makers to make Tile and Tile makers to make Brick, changing from one to the other in less than 5 minutes, and the cost of the Machine is no more than those in ordinary use, it being the simplest arrangement known. The quality of Brick made, is but a little inferior to pressed Brick.

Farmers, if you want Tile made cheap and near you, see yourselves that it is done. See to it that *some one* gets a machine and makes them. Farmers, if you want Ditches made quickly and cheaply, buy a Ditch Digger, or find a man that will do it. Farmers and others, if you want to see these machines at work, come when frost has disappeared and see them. We shall be ready, and take pleasure in showing them to you.

Brick makers, do you want to change your business for the better? Then make Tile and better Brick, and you will be the gainer, and agriculture accommodated. We have a large number of Tile Dies from which to select.

Dealers in Agricultural Implements, we will supply you on favorable terms. Persons wanting exclusive Patent privileges, we will negociate with you. All, wanting any further information, will please address PRATT & BROS

Dec. 21—w&mtf. Canandaigua, N. Y.

PURE BRED ANIMALS

AT PRIVATE SALE.

Mount Fordham, Westchester Co., 11 miles from City Hall, New-York, by Harlem Railroad.

HAVING completed the sale of my domestic animals, as advertised in Catalogue of 1854, excepting Short Horn Bull BALCO (9918), and at prices highly remunerative, for which patronage I feel grateful, not only to the public of almost every State in our Union, but to the Canadas, Cuba, and the Sandwich Islands, *I will issue about the 1st of March, a Catalogue for* 1855, consisting of Short Horned Bulls and Bull Calves, (some of which belong to my friend and part associate, Mr. N. J. BECAR,) North Devon Bulls and Bull Calves, Southdown Rams, Suffolk, Berkshire and Essex Swine, now ready for delivery, of almost all ages, and of both sexes. This Catalogue will be illustrated with portraits of my Prize Animals. Most of the original animals of my breeding establishment, were selected by me from England in person, and strictly in reference to qualities, in my judgment, best adapted for the use of this country.

Feb. 1—w&mtf L. G MORRIS.

IMPORTED "MONARCH."

BY PRIAM, out of Delphine by Whisker, will stand at L. G. Morris' Herdsdale Farm, 1½ mile from Scarsdale Depot, and 24 miles from New-York by Harlem Railroad. Terms: $20 the season for mares not thorough-bred, and $50 for thorough-breds. Pasturage, $3 per month. Accidents and escapes at the risk of the owner. All business connected with the horse, to be addressed to "MONARCH'S GROOM, Scarsdale P. O., Westchester Co., N. Y." A portrait taken from life, with performances on the turf, full pedigree, &c. &c., will be forwarded by mail, by addressing

L. G MORRIS,

March 22 Fordham, Westchester Co., N Y.

PURE BRED STOCK

FOR SALE—Thorough Bred Durham Cattle, Pure Bred Spanish Sheep, French Sheep, and Suffolk Pigs.

Apply to J. S. GOE, Tippecanoe, 4½ miles east of Brownsville, Fayette Co., Pa. March 1—w1y*

Thorough-Bred Short Horns.

DURHAM Bull and Heifer Calves, descended from the herds of Mr. Bates and his nephew Mr. Bell, for sale.

HERMAN WENDELL, M. D.

Nov. 23—wtf Albany.

THOMAS GOULD,

BREEDER of Durham and Devon Cattle, Leicester Sheep, Suffolk Swine, Madagascar or Lop-eared Rabbits, English Ferrets, Guinea Pigs, Choice and Fancy Poultry.

Jan. 18—w&mtf Aurora, Cayuga Co., N. Y.

Ketchum's Mowing Machine.

THE subscribers have made arrangements by which they have the exclusive sale of this celebrated Mowing Machine in and for Albany and vicinity. They will furnish them with all the latest improvements, and one extra set of knives, and the fullest warranty to work to the satisfaction of the purchasers, as follows:

For One Horse Mower, $95; for Two Horse Mower, $118; with Reaper Attachment, $15 extra.

All persons desiring Mowers, and who can obtain them from this point, should order them early, to prevent disappointment, as the supply will be limited.

EMERY BROTHERS,

March 22— 52 State-st, corner of Green, Albany.

Suffolk Pigs,

OF pure blood, for sale by B. V. FRENCH,

Feb 1—m1y Braintree, Mass.

EXCELSIOR
AGRICULTURAL IMPLEMENT MANUFACTORY,
WARE-HOUSE AND SEED STORE,
369 & 371 BROADWAY, ALBANY, NEW-YORK.

RICH'D H. PEASE, PROPRIETOR.

THE EXCELSIOR RAILROAD HORSE POWER,

WITH

Threshers, Separators, Cleaners, Clover Hullers, Circular and Cross Cut Saw Mills,

For various purposes, and all other Implements adapted to the Power, is not surpassed by any now in use and is offered on the most Liberal Terms, both as to discount and warrantee.

THE subscriber is manufacturing the above Power which combines all the qualities of the most celebrated Rail-Road Horse Powers, and some very valuable improvements.

Capacity, Economy and Warrantee.

The single Power will thresh from 75 to 125 bushels of oats, rye, buckwheat or barley, easily, in one day, attended by three men, and will saw from 20 to 25 cords of wood in the same time and with the same number of men. The double Power will perform almost double the amount of work in the same time, with one additional man, and all other work of a similar kind with equal facility. The construction of this Power is such that its motion can be readily changed from slow to fast with the same speed of the horse, as the gears are all outside the Power, and accessible at all times.

The warrantee is as follows:—If the Powers do not answer the description, and do any reasonable amount of work required of them, the money will be refunded, and the machine returned at the manufacturer's expense.

Fisk Russell's Mowing Machine.

The subscriber is sole agent for the State of New-York, and general agent for the United States for this celebrated machine, which is justly entitled to its name,

"KING OF THE MOWERS."

It will cut and spread 15 acres of grass in a day, with ease, and it is warranted not to clog. It cuts wet grass equally as well as dry, and fine as well as coarse. It has two wheels, and a "cam" motion, and no side draft. It can be conveyed from place to place with as much facility as a wagon. This machine was awarded a Silver Medal at the N. Y. State Agricultural Society's Fair in New York last fall. The supply is limited, and those wishing this Mower will please send their orders early. Certificate of B. B. KIRTLAND, Esq., Treasurer of N. Y. State Agricultural Society:

DEAR SIR—I used Fisk Russell's Mowing Machine on my farm, last season, and mowed about 60 acres of various kinds of grass, from coarse timothy to short, fine grass, both green and ripe. I have no hesitation in saying that in all its performance, that is, ease of *draft, not clogging*, and the perfection of the cut, it is the best machine I ever saw.

Greenbush, N. Y. B. B. KIRTLAND.

On the 26th of January, 1854, I purchased the entire stock in trade and machinery for manufacturing, of the Albany Agricultural Works of this city, and am prepared to furnish a full and complete assortment of Field and Garden Seeds and

AGRICULTURAL IMPLEMENTS.

Thankful for the patronage heretofore so liberally bestowed on me, I most respectfully solicit a share of the favor of the agricultural community. For further particulars, address

RICH'D H. PEASE, Albany, N. Y.

Fertilizers.

BEST Peruvian Guano—
Super-Phosphate of Lime, "DeBurg's No. 1"—
Poudrette, of the best quality—
Ground Plaster, suitable for agricultural purposes—
Ground Bone, Bone Dust, and Burnt Bone.

Also, Grass Seeds of reliable quality, at the lowest market price. GEO. DAVENPORT, 5 Commercial,

Feb. 9, 1854—w&mtf cor. of Chatham st., Boston.

BLACK HAWK.

THE original VERMONT BLACK HAWK will serve a limited number of mares the coming season at $100 each. Gentlemen wishing to secure the services of this horse, must send in their letters at once.

Good pasturing at 50 cents per week. All accidents and escapes at the risk of the owner. DAVID HILL,

March 1, 1855—m5t Bridport, Addison Co., Vt.

ENGLISH CATTLE,

Imported on commission by Messrs. THOS. BETTS BROS., Bishop's Stratford, Herts, England—81 *Maiden Lane, New-York City.*

BEING much the cheapest and the only way of obtaining Stock direct from the Breeder, which will give gentlemen an opportunity of obtaining the best stock, without having to pay an exorbitant price for them in America. The firm having had forty years' experience, they feel confident of giving satisfaction both as regards price and selecting the stock from the best herds in England.

Thorough-bred Horses,	Hampshire Sheep,
Short-Horned Cattle,	Cotswold, Leicester do
Devons, Herefords, Ayrshires,	Suffolk Pigs,
Alderney Cows from Islands of Alderney and Guernsey,	Essex, Berkshire do
Pure bred Southdown Sheep,	Merino Sheep from Spain,
	Mules, do do

Messrs. Betts Bros. have appointed one of the most experienced men in England entirely for purchasing Thorough Bred Horses. They have also an agent in Spain for purchasing mules, Merino Sheep, etc. Messrs. Betts Bros. have purchased a valuable patent invention which will prevent accidents occurring to cattle across the Atlantic. They can now be safely imported any time during the year. The cattle will be insured from Liverpool to New-York when desired, by charging a small per centage.

A steamer will leave Liverpool with cattle about the first of every month. The stock will be delivered at New York about six weeks from the time the order is given in America.

Circulars containing all particulars, expenses to America, and the prices of Cattle in England, may be had by applying by post to Messrs. THOS. BETTS,
or, J. M. MILLER, Agent, 81 Maiden-lane
Jan. 4—1am—m1y. New York City.

FARMERS AND GARDENERS

WHO cannot get manure enough, will find a cheap and powerful substitute in the IMPROVED POUDRETTE made by the subscribers. The small quantity used, the ease with which it is applied, and the powerful stimulus it gives to vegetation, render it the cheapest and best manure in the world. It causes plants to come up quicker, to grow faster, to yield heavier and ripen earlier than any other manure in the world, and unlike other fertilizers, it can be brought in direct contact with the plant. Three dollars worth is sufficient to manure an acre of corn. Price, delivered free of cartage or package on board of vessel or railroad in New-York city, $1.50 per barrel, for any quantity over six barrels; 1 barrel, $2; 2 barrels, $3.50; 3 barrels, $5.00; 5 barrels, $8.00. A pamphlet with information and directions will be sent gratis and postpaid, to any one applying for the same.

Address, the LODI MANUFACTURING COMPANY,
74 Cortlandt Street, New-York.

WATERTOWN, Mass., Oct. 19, 1854.

Lodi Manufacturing Company:

Gentlemen—at the request of John P. Cushing, Esq. of this place, I have, for the last five years, purchased from you 200 barrels of POUDRETTE per annum, which he has used upon his extensive and celebrated garden in this town. He gives it altogether the preference over every artificial manure, (Guano not excepted,) speaks of it in the highest terms as a manure for the kitchen garden, especially for potatoes.

I am, gentlemen, very respectfully,
Your obedient servant,
Jan. 18—w1am4t—m4t BENJAMIN DANA.

Fertilizers—Established Nine Years.

KENTISH'S Prepared Guano—Price $25 per Ton. Superphosphate, No. 1, by the New-York Manufacturing Company—Price $40 per Ton. Both these articles can be had at the Depot No. 159 West Street, New-York City.
March 22—w3tm3t KENTISH & CO.

Farm Lands for Sale,

IN LOTS TO SUIT PURCHASERS.

OVER 2,000,000 OF ACRES of Selected Prairie Farm Lands, belonging to the Illinois Central Railroad Company. The price will vary from $5 to 25, according to quality, location, &c. The purchase money may be payable in five equal installments, the first to come due in two years from date of contract, the others annually thereafter—giving six years to pay for the land, with a charge of only *Two per cent per annum interest.* The first two years' interest payable in advance. The Company's construction bonds received as cash. Apply to CHAS. M. DUPUY, Jr.,
Land Agent Ill. Cen. R. R. Co.
March 15—m6t* No. 84 Lake St., Chicago, Ill.

SUPERIOR THOROUGH-BRED

Devon Cattle and Essex Pigs for Sale.

THE subscriber, having this day purchased from Mr. W. P. Wainright, his interest in the herd of Devon Cattle hitherto owned conjointly by them, will continue to give his strict attention to the breeding and raising of this increasingly popular breed. Having now a herd of over twenty head, bred entirely from animals of his own importation, he is enabled to offer for sale a few young Bulls and Heifers, of very superior quality.

Also constantly on hand, thorough-bred ESSEX PIGS, descended from the best imported stock.

For full particulars as to age, price, pedigree, &c., address
C. S. WAINRIGHT,
April 1—m3t Rhinebeck, Dutchess Co., N. Y.

NOTICE TO THE PUBLIC.

WHEREAS, many Grape roots are now being sold in different parts of the country, for the EARLY NORTHERN MUSCADINE, which we consider the best of all Grapes for this northern latitude—the public are hereby cautioned against imposition: as many of these are spurious, and not the genuine kind, as there has not yet been time to grow many since these first came before the public. The subscribers will only hold themselves responsible for the genuineness of such as are ordered to their personal address, or of their legally appointed agents, who will at all times be able to to show proper reference to that effect.

D. J. HAWKINS,
P. STEWART.
New Lebanon, Shaker Village,
March 15, 1855—w2tm2t. Columbia Co., N. Y.

FARM FOR SALE.

A FARM of One Hundred acres in MILO CENTER, Yates Co., N. Y. a short distance from the line of the Canandaigua and Elmira Rail Road. It is well watered by springs and a fine stream, easily cultivated—soil a fine gravelly loam, unsurpassed for either grain or grass, with exception of about 20 acres which is *choice* natural meadow land.

It has upon it a good *Dwelling House* and out Buildings—is in a good neighborhood, convenient to churches, school houses and stores, and is in every respect one of the most desirable locations in the state. For terms which will be made easy, apply to GASPER & Co., 41 Water St., New-York; Caleb Gasper, Esq., Marcellus, Onondaga Co., Geo Young, Esq., Milo Center, Elias Bently, Esq., Sandy Creek, Oswego Co., S. Booth, Esq., Branchport, Yates Co. Norman Seymour, Mechanicsville, Saratoga Co., N. Y., Judge Ellsworth, Pen Yan. March 1—mtf—

G. WESTINGHOUSE & CO.

CONTINUE the manufacture of Threshing Machines, Clover Cleaners, Wood Saws, &c., at Central Bridge, Schoharie Co., N. Y.

We have improved our Thresher and Cleaner, (and for which we have obtained a Patent last year,) which works superior to anything of the kind in use, and has given entire satisfaction where used.

Our Horse-Power, Thresher and Separator, has the name of being the best machine in use, where known. Those wanting machines will be more likely to get them when wanted by ordering them early, as we shall not be able to make more than 100 of them this season. Last year we did not supply the demand by a large number, being unable to get them out in time.

Further information given on application by mail otherwise.
G. WESTINGHOUSE & CO.
March 22—w4tm3t Central Bridge, N. Y.

Agricultural Books,

For sale at the office of the Country Gentleman.

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